Docket:	:	A.09-07-001
Exhibit Number	:	
Commissioner	:	John Bohn
Admin. Law Judge	:	Jeffrey O' Donnell
DRA Project Mgr.	:	Patrick Hoglund

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT ON THE RESULTS OF OPERATIONS IN LIVERMORE DISTRICT OF CALIFORNIA WATER SERVICE COMPANY

Test Year 2011 and
Escalation Years 2012 and 2013
Application 09-07-001

For authority to increase water rates located in its
Livermore District serving portions of City of Livermore
and vicinity, Alameda County.

San Francisco, California
February 17, 2010

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MEMORANDUM

The Division of Ratepayer Advocates ("DRA") of the California Public Utilities Commission ("Commission") prepared this Report in California Water Service Company's ("CWS") rate case proceeding A.09-07-001. In this docket, the Applicant requests an order for authorization to increase rates charged for water service by $2,916,700 or 16.6 % in Test year 2011; by $441,600 or 2.2% in Escalation year 2012; and by $441,600 or 2.1% in Escalation year 2013 in its Livermore District service area. The applicant requests adoption of a rate of return of 8.58% from D. 09-05-019. DRA presents its analysis and recommendations associated with the Applicant's request in this Report.

Patrick Hoglund serves as DRA's project coordinator in this review, and is responsible for the overall coordination in the preparation of this report. Appendix A contains witnesses' prepared qualifications and testimony.

DRA's reports on payroll, conservation expenses and special requests are included under separate Reports.

DRA's Legal Counsels for this case are Selina Shek, Allison Brown, and Hien Vo.

EXECUTIVE SUMMARY

CWS requests increasing rates by 16.6% in Test Year 2011 and 2.2% in Escalation Year 2012, whereas DRA recommends an increase of 9.3% in Test Year 2011 and inflationary increases for the Escalation Years

Key Recommendations

DRA recommends that CWS' requested rate of return of 8.58% be adopted in this proceeding.

DRA's recommendations are based on total higher sales (Chapter 2), lower estimates of Operation and Maintenance expenses (Chapter 3), lower estimates of Administrative and General expenses (Chapter 4), lower Plant additions (Chapter 7) and lower Ratebase (Chapter 9).

DRA addresses its recommended treatment of CWS' 30 Special Requests ("SR") in a separate report. That report discusses Special Request #7, regarding residential sprinkler rates for Livermore District.

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
-	Executive Summary	
1	Overview and Policy Introduction and Summary of Earnings	Patrick Hoglund
2	Water Consumption and Operating Revenues	Lisa Bilir Zachary Burt
3	Operations and Maintenance (except Payroll) Expenses	Pat Ma
4	Administrative & General (except Payroll & Conservation) Expenses	Cleason Willis Jose Cabrera
5	Taxes Other Than Income	Jerry Oh
6	Income Taxes	Jerry Oh
7	Utility Plant in Service	Isaiah Larsen
8	Depreciation Reserve and Depreciation Expense	Isaiah Larsen
9	Ratebase N/G multiplier	Isaiah Larsen Richard Rauschmeier
10	Customer Service	Toni Canova
11	Rate Design	Lisa Bilir
12	Water Quality	Pat Ma
13	Step Rate Increase	Patrick Hoglund

CHAPTER 1: OVERVIEW AND POLICY

A. INTRODUCTION

This Report sets forth DRA's analysis and recommendations for A. 09-07-001, CWS' general rate increase request for Test Year 2011 and Escalation Years 2012 and 2013.

B. SUMMARY OF RECOMMENDATIONS

Tables 1-1 through 1-3 of the Summary of Earnings compare the results of operations for Test Year 2011 including revenues, expenses, taxes and ratebase.

C. DISCUSSION

CWS requests the total revenues as follows:

Year	Amount of Increase	Percent
2011	$2,916,700	16.6%
2012	$ 441,600	2.2%
2013	$ 441,600	2.1%

CWS estimates that its proposed rates in the Application will produce revenues providing the following returns:

Year	Return on Rate Base	Return on Equity
2011	8.58%	10.2%
2012	8.58%	10.2%
2013	8.58%	10.2%

D. CONCLUSION

DRA recommends a revenue increase for the Test Year as follows (Escalation Years 2012 and 2013 are covered in Chapter 13):

Year	Amount of Increase	Percent
2011	$1,557,200	9.3%

D.08-07-008 authorized the last general rate increase for CWS in A. 07-07-001, resulting in a rate of return on rate base of 8.66% in 2008-2009.

A comparison of DRA and CWS' estimates for rate of return on rate base for the Test Year 2011 at present and the utility's proposed rates is shown below:

RATE OF RETURN

	DRA	CWS	Diff
Present Rates	4.73%	2.54%	-2.18%
Proposed Rates	14.43%	8.58%	-5.85%

TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	16,749.8	17,528.3	778.5	4.6%
Operating expenses:				
Operation & Maintenance	10,327.1	10,909.0	581.9	5.6%
Administrative & General	927.8	1,045.5	117.7	12.7%
G. O. Prorated Expense	1,850.7	2,494.2	643.5	34.8%
Dep'n & Amortization	1,617.5	1,752.6	135.1	8.4%
Taxes other than income	548.5	617.5	69.0	12.6%
State Corp. Franchise Tax	45.9	(41.1)	(87.0)	-189.4%
Federal Income Tax	289.1	(4.1)	(293.3)	-101.4%
Total operating exp.	15,606.7	16,773.7	1,167.0	7.5%
Net operating revenue	1,143.1	754.6	(388.5)	-34.0%
Rate base	24,178.8	29,666.3	5,487.5	22.7%
1 Return on rate base	4.73%	2.54%	-2.18%	-46.2%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	20,698.7	20,445.0	(253.7)	-1.2%
Operating expenses:				
Operation & Maintenance	10,335.9	10,915.5	579.6	5.6%
Administrative & General	927.8	1,045.5	117.7	12.7%
G. O. Prorated Expense	1,850.7	2,494.2	643.5	34.8%
Dep'n & Amortization	1,617.5	1,752.6	135.1	8.4%
Taxes other than income	576.5	645.2	68.7	11.9%
State Corp. Franchise Tax	391.8	213.7	(178.1)	-45.5%
Federal Income Tax	1,510.1	832.9	(677.2)	-44.8%
Total operating exp.	17,210.3	17,899.6	689.3	4.0%
Net operating revenue	3,488.4	2,545.4	(943.0)	-27.0%
Rate base	24,178.8	29,666.3	5,487.5	22.7%
1 Return on rate base	14.43%	8.58%	-5.85%	-40.5%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
	(Thousands of $)			
Operating revenues	16,749.8	18,307.0	1,557.2	9.3%
Operating expenses:				
Operation & Maintenance	10,327.1	10,330.6	3.5	0.0%
Administrative & General	927.8	927.8	0.0	0.0%
G. O. Prorated Expense	1,850.7	1,850.7	0.0	0.0%
Dep'n & Amortization	1,617.5	1,617.5	0.0	0.0%
Taxes other than income	548.5	548.5	0.0	0.0%
State Corp. Franchise Tax	45.9	183.3	137.3	298.9%
Federal Income Tax	289.1	774.1	484.9	167.7%
Total operating exp.	15,606.7	16,232.4	625.7	4.0%
Net operating revenue	1,143.1	2,074.5	931.4	81.5%
Rate base	24,178.8	24,178.8	0.0	0.0%
1 Return on rate base	4.73%	8.58%	3.85%	81.5%

CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations regarding the forecasted number of customers, water sales and operating revenues for CWS' Livermore district. Livermore had an average of 18,228 service connections in 2008; the Livermore district includes the City of Livermore and vicinity, in Alameda County. DRA reviewed CWS' data responses, testimony, application, and workpapers before formulating its own estimates.

B. SUMMARY OF RECOMMENDATIONS

DRA adhered to the methods outlined in the Rate Case Plan ("RCP") in DRA's analysis of sales forecast and revenues. Whereas, CWS' sales forecast method differed from the RCP. Appendix A to Chapter 2 for DRA's Bakersfield report provides a detailed explanation of DRA's sales forecast and revenue methods. The Commission should uphold the methods outlined in the RCP by adopting DRA's recommendations presented in this report.

1) Average Active Service Connections

The Commission should adopt DRA's recommended number of service connections. CWS proposes to forecast the number of customers using the change in the number of customers by customer class in 2007 for the Residential, Business and Multifamily customer classes, and by the five-year average (2004-2008) for the Industrial, Public Authority and Other customer classes. CWS claims that the change in customers in 2007 is more representative of the current trend than the five-year average change in customers for the Residential, Business, and Multifamily customer classes, although it provides no evidence supporting this. Because 2008 is not representative of previous growth trends for the Residential, Business, Multifamily and Public Authority customer classes due to

reclassifications made in preparation for the implementation of the WRAM, DRA proposes using the four-year average change in the number of customers for these four customer classes, and the five-year average for the Industrial and Other customer classes.

2) Metered Sales and Supply

The Commission should require CWS to use the method proposed by DRA for residential and business customers, in accordance with the RCP, going forward, and should also adopt DRA's estimates for metered sales and supply in this case. Table 2-1 at the end of this chapter illustrates DRA and CWS' proposed sales per average customer for each customer class. DRA uses the same general methodology as CWS to estimate multiple regression equations in accordance with the RCP and the "New Committee Method" ("NCM"). As is outlined in the NCM, rain, temperature and time are included in the regression model, where possible. The primary difference between DRA and CWS' forecasts are that CWS used the regression equations to calculate weather-adjusted recorded sales from 2008 and used this as its estimated sales for 2011. DRA used the regression equations to calculate forecasted sales for 2011 and 2012, based on the 30-year monthly average rain and temperature, in accordance with the RCP.[1]

3) Operating Revenues

The Commission should adopt DRA's estimates for operating revenues. DRA uses the same method as CWS to calculate operating revenues, although DRA presents the operating revenues differently for illustrative purposes (see Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2. for the complete explanation).

[1] D.07-05-062, Appendix A – Rate Case Plan and Minimum Data Requirements for Class A Water Utilities General Rate Applications, p. A-23, footnote 4, (B) "Use 30-year average for forecast values for temperature and rain"

4) Unaccounted for Water

CWS estimates 6.53% unaccounted for water in Livermore and DRA agrees.

C. DISCUSSION

1) Average Active Service Connections

Customer growth is the forecasted growth of a customer base in a given area. CWS and DRA use customer growth to project revenues for 2011-2012. The RCP, adopted in D.07-05-062 requires the number of customers to be forecast using a five-year average of the change in the number of customers by customer class, unless an unusual event occurs, in which case an adjustment to the five-year average may be made.[2] Table 2-2 and 2-3 at the end of this chapter summarize DRA and CWS' proposed average number of customers for each customer class in 2011 and 2012, respectively.

a. Residential, Business, Multifamily, Public Authority, Industrial, and Other

For Residential, Business and Multifamily customer classes, CWS proposes to forecast the number of customers using the change in customers in 2007. For Public Authority, Industrial, and Other customer classes, CWS proposes to forecast the number of customers using the five-year average of the change in the number of customers by customer class. However, because 2008 was an anomalous year in terms of customer reclassifications, DRA proposes to forecast the number of customers using the four-year average (2004-2007) of the change in the number of customers by customer class for the Residential, Business, Multifamily and Public Authority customer classes and the five-year average

[2] D.07-05-062, Appendix A: RCP, p. A-23, footnote 4.

(2004-2008) for the Industrial and Other customer classes. DRA notes that the California Department of Finance ("CDF") forecasts residential growth in Livermore to be 1.5%. The Residential forecast proposed by CWS results in a growth rate of 0.08%, while the forecast proposed by DRA is closer to that of the CDF, at 0.71%. DRA further notes that the end of year ("EOY") 2008 number of customers was zero for the Industrial customer class, and the forecasted annual change for this customer class proposed by CWS was also zero, and DRA agrees.

2) Metered Sales and Supply

Table 2-4 and 2-5 at the end of this chapter summarize DRA and CWS' proposed metered and flat rate sales in Livermore for each customer class in 2011 and 2012, respectively.[3] DRA removed CWS' 1.5% conservation adjustment to consumption in 2012 and the reasons are described in Appendix A to the Bakersfield report, section A. 4.

b. Residential metered

DRA accepts CWS' use of the unconstrained regression model. However, DRA used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows the regression model that DRA and CWS chose. The following table summarizes DRA and CWS' recommendations:

[3] If DRA's sales forecast combined with DRA's other recommendations leads to higher bill increases than CWS presented in its notices to customers, DRA recommends that the total bill increases should be capped at CWS' proposed levels.

Table 2-a: forecasted sales (ccf[4]/service)

	CWS	DRA	% difference
2011	230.4	234.6	1.8%
2012	226.9	236.5	4.2%

c. Business

DRA accepts CWS' use of the unconstrained model. However, DRA did not include the autoregressive term and used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows DRA's regression model.Table 2-b below summarizes DRA and CWS' recommendations for sales per service for business customers:

Table 2-b: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	645.8	644.9	-0.1%
2012	636.1	648.6	2.0%

d. Multifamily

Multifamily customers accounted for 4.99%[5] of metered sales for the Livermore district in 2008. DRA accepts CWS' use of the unconstrained model. However, DRA used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows DRA's regression model. Table 2-c below summarizes DRA and CWS' recommendations for sales per service for Multifamily customers:

Table 2-c: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	3,202.4	2,920.6	-8.8%
2012	3,154.4	2,866.9	-9.1%

[4] 100 cubic feet

[5] Calculated from CWS' Table 4-C

e. Industrial

Since no customers are forecasted for this customer class by both CWS and DRA, the sales forecast is also zero.

f. Public Authority

Public Authority customers in the Livermore district accounted for 8.99% of metered sales in 2008. CWS recommends the use of the unconstrained model to weather-adjust 2008 sales to forecast sales for the Public Authority customer class. DRA found insufficient statistical confidence estimated for the time variable coefficient, and therefore proposes the modified unconstrained model (including monthly temperature variables and rain but not time). Table 2-d below compares DRA and CWS' forecasted sales for the Public Authority customer class.

Table 2-d: forecasted sales (Kccf)[6]

	CWS	DRA	% difference
2011	422.5	379.2	-10.2%
2012	416.2	379.2	-8.9%

g. Other

DRA agrees with CWS' proposed method to use the five-year average sales for the Other customer class.

h. Winery

CWS' Report on Forecasts[7] discusses the "Winery" customer class in the Livermore district. CWS inadvertently excluded this customer class from the

[6] The numbers in Table 2-d differ from the numbers in Table 2-1 because Table 2-d illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

workpapers.[8] The Commission should require CWS to include this customer class in the sales forecast, and DRA does not object to the average usage for the past three years to forecast sales.

3) Operating Revenue

Tables 2-6 and 2-7 at the end of this chapter summarize DRA and CWS' forecasted operating revenue at present rates in 2011, at CWS proposed rates in 2011 and at present rates in 2012, respectively.

(a) Residential

CWS calculates operating revenue for metered residential customers by (1) taking the sum of estimated quantity revenues calculated for each meter size, for each month and for each tier of the increasing block rate design based on three-year average sales patterns and (2) adding this to the estimated service charge revenues, calculated by taking the average number of customers each year and multiplying it by the service charge. CWS' method is outlined in detail in Appendix A of Chapter 2 in DRA's Bakersfield Report. DRA does not recommend any changes to this method.

(b) Business, Multifamily, Public Authority, Industrial and Other

CWS calculates operating revenues for Business, Multifamily, Public Authority, Industrial, and Other customers by (1) taking the sum of estimated quantity revenues for each meter size, for each month based on three-year average

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(continued from previous page)

[7] Report on Forecasts for California Water Service Company's 2009 Rate Filing by Wendy Illingworth, March 2009.

[8] Email from Tu Rash 12/10/2009, which states that CWS has previously not included the "Wente Wineries" in the sales forecast, and this is the first year that CWS submitted the consumption data to Wendy.

sales patterns and (2) adding the quantity revenues to the estimated service charge revenues, calculated by multiplying the forecasted average number of customers by the meter charges. CWS' method is outlined in detail in Appendix A to Chapter 2 of DRA's Bakersfield Report. DRA does not recommend any changes to this method.

4) Unaccounted for Water

CWS estimates 6.53% unaccounted for water in Livermore based on a five-year average of the percentage of unaccounted for water from 2004-08. DRA accepts the proposed unaccounted for water estimate.

D. CONCLUSION

1) Average Active Service Connections

The Commission should adopt DRA's recommended number of service connections.

2) Metered Sales and Supply

DRA recommends adherence to the RCP and NCM for forecasting metered sales and supply and recommends that the Commission adopt DRA's forecasted sales estimates and require CWS to use the method proposed by DRA for residential and business customers going forward.

3) Operating Revenues

DRA accepts CWS' method for calculating operating revenues, with the following modifications for illustrative purposes: for all customer classes, DRA used the present rates given by CWS at the time it filed the GRC application to illustrate Operating Revenues at Present Rates for 2011 and 2012. Also, DRA used the proposed rates from CWS' GRC application filed in July 2009 to calculate Operating Revenues at Proposed Rates. Appendix A to Chapter 2 for

DRA's Bakersfield report in section B. 1., and B. 2. provides a detailed explanation.

4) Unaccounted for Water

CWS estimates 6.53% unaccounted for water in the Livermore district based on the five-year average recorded unaccounted for water, and DRA agrees.

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(CCF/CONN./YR)			
Residential	234.6	230.4	(4.2)	-1.8%
Business	644.9	645.8	0.9	0.1%
Multiple Family	2,920.6	3,202.4	281.8	9.6%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	1,607.0	1,612.7	5.7	0.4%
Other	553.3	553.9	0.5	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Res. Flat Rate	0.0	0.0	0.0	0.0%

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
Metered Connections				
Residential	16,786	16,525	(261)	-1.6%
Business	1,073	1,065	(8)	-0.7%
Multiple Family	76	76	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	236	262	26	11.0%
Other	15	15	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	18,186	17,943	(243)	-1.3%
Flat Rate Connections				
Residential Flat	0	0	0	0.0%
Private Fire Protection	379	379	0	0.0%
Public Fire Protection	46	46	0	0.0%
Total flat rate connections	425	425	0	0.0%
Total Active Connections				
Include Fire Protection	18,611	18,368	(243)	-1.3%
Exclude Fire Protection	18,186	17,943	(243)	-1.3%

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
Metered Connections				
Residential	16,904	16,538	(366)	-2.2%
Business	1,090	1,078	(12)	-1.1%
Multiple Family	76	76	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	237	273	36	15.2%
Other	12	12	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	18,319	17,977	(342)	-1.9%
Flat Rate Connections				
Residential Flat	0	0	0	0.0%
Private Fire Protection	391	391	0	0.0%
Public Fire Protection	47	47	0	0.0%
Total flat rate connections	438	438	0	0.0%
Total Active Connections				
Include Fire Protection	18,757	18,415	(342)	-1.8%
Exclude Fire Protection	18,319	17,977	(342)	-1.9%

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(KCCF/YEAR)			
Metered Sales				
Residential	3,937.8	3,807.4	(130.5)	-3.3%
Business	692.0	687.8	(4.2)	-0.6%
Multiple Family	222.0	243.4	21.4	9.6%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	379.2	422.5	43.3	11.4%
Other	8.3	8.3	0.0	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	5,239.3	5,169.4	(70.0)	-1.3%
Flat Rate Sales				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 6.53%	366.3	361.4	(4.9)	-1.3%
Total delivered	5,605.6	5,530.8	(74.9)	-1.3%
Supply				
Company Wells	1,249.2	1,249.2	0.0	0.0%
Leased Wells	90.7	90.7	0.0	0.0%
Purchases	4,265.7	4,190.9	(74.8)	-1.8%
Total production	5,605.6	5,530.8	(74.8)	-1.3%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(KCCF/YEAR)			
Metered Sales				
Residential	3,997.7	3,753.2	-244.5	-6.1%
Business	707.0	685.7	-21.2	-3.0%
Multiple Family	217.9	239.7	21.8	10.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	379.2	416.2	36.9	9.7%
Other	8.3	8.2	-0.1	-1.4%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	5,310.1	5,103.0	(207.0)	-3.9%
Flat Rate Sales				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 6.53%	371.2	356.7	(14.5)	-3.9%
Total delivered	5,681.3	5,459.7	(221.5)	-3.9%
Supply				
Company Wells	1,249.7	1,249.7	0.0	0.0%
Leased Wells	90.7	90.7	0.0	0.0%
Purchases	4,340.9	4,119.3	(221.6)	-5.1%
Total production	5,681.3	5,459.7	(221.6)	-3.9%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
WRAM Revenues				
Residential	11,099.4	10,731.7	(367.7)	-3.3%
Business	1,987.1	1,974.9	(12.2)	-0.6%
Multiple Family	637.4	698.8	61.4	9.6%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	1,089.0	1,213.2	124.2	11.4%
Other	23.8	23.9	0.1	0.4%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	14,836.7	14,642.5	(194.2)	-1.3%
Non-WRAM Revenues				
Service Charges	1,641.3	2,614.0	972.7	59.3%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	187.8	187.8	0.0	0.0%
Public Fire Protection	26.0	26.0	0.0	0.0%
Other	58.0	58.0	0.0	0.0%
Total Flat Rate	1,913.1	2,885.8	972.7	50.8%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	16,749.8	17,528.3	778.5	4.6%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
WRAM Revenues				
Residential	13,102.2	12,668.2	(434.0)	-3.3%
Business	2,345.6	2,331.2	(14.4)	-0.6%
Multiple Family	752.4	824.9	72.5	9.6%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	1,285.4	1,432.2	146.8	11.4%
Other	28.1	28.2	0.1	0.4%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	17,513.7	17,284.7	(229.0)	-1.3%
Non-WRAM Revenues				
Service Charges	2,877.3	2,852.8	(24.5)	-0.9%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	201.2	201.2	0.0	0.0%
Public Fire Protection	27.9	27.9	0.0	0.0%
Other	78.6	78.6	0.0	0.0%
Total Flat Rate	3185.0	3160.4	-24.6	-0.8%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	20,698.7	20,445.0	(253.7)	-1.2%

CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES

A. INTRODUCTION

This Chapter presents DRA's analysis and recommendations on Operation and Maintenance ("O&M") expenses in the Livermore District of the California Water Service Company ("CWS") for Test Year 2011. Table 3-A shows the comparison of total O&M expense estimates at present rates for the Test Year.

Table 3-A. Comparison of Livermore District's Total O&M Expense Estimates (including Payroll and Conservation).

Test Year 2011	DRA	CWS	CWS Exceeds DRA
Total O&M Expenses	$10,327,100	$10,909,000	$581,900 or 5.6%

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that the Commission adopt its estimates for individual O&M expense accounts as discussed in the following sections. For the Livermore District, DRA recommends adjustments to CWS' Test Year expense estimates for the following O&M expense accounts: (1) Purchased Water; (2) Purchased Power; (3) Postage; and (4) Operations Transportation; (5) Maintenance Transportation; and (6) Uncollectibles.

C. DISCUSSION

DRA conducted an independent analysis of CWS testimonies, workpapers and methods of estimating the O&M expenses for the Livermore District in this General Rate Case ("GRC").

Generally, CWS uses a five-year average of recorded expenses adjusted for inflation to estimate its O&M expenses. CWS deviates from the five-year average approach when it believes excluding a certain year's recorded expense from the average would provide a more accurate estimate of forecast years' expense levels.

DRA reviews the overall pattern of inflation-adjusted recorded expenses to assess the reasonableness of CWS' estimates and to propose alternative estimates, where applicable. DRA also examines the recorded data to determine the appropriateness of including in the forecast (averaging) calculation certain costs, such as one-time costs that are not expected to occur in the forecast period.

In calculating expenses that are a function of water production, sales and/or number of customers, DRA uses its estimates presented in Chapter 2 – Water Consumption and Operating Revenues of this Report. Both DRA and CWS apply DRA Energy Cost of Service Branch's escalation factors issued on May 31, 2009 to develop forecasted expenses.

Table 3-1 at the end of this Chapter summarizes the O&M expense estimates DRA recommends and compares them with CWS requests for Test Year 2011. Each O&M expense account listed in Table 3-1 is discussed below.

1) OPERATION EXPENSES

(a) PURCHASED WATER

The Livermore District's water supply comes from twelve company-owned wells, one leased well (the Mingoia well), and purchased water from Zone 7 of the Alameda County Flood Control and Water Conservation District ("Zone 7"). CWS calculates its Purchased Water expense estimates based on existing agreements with Zone 7 and the Mingoia Well's owner, respectively.

DRA reviewed the Zone 7 purchased water contract and Mingoia Well lease agreement and agrees with CWS' method of estimating the District's Purchased Water costs. DRA summarizes its Purchased Water expense estimates reflecting its purchased water forecasts presented in Chapter 2. DRA's estimates are higher than CWS' due to DRA's higher purchased water supply forecasts.

Purchased Water for 2011	DRA's Estimates
Zone 7 Purchased Quantity (KCcf)	4,265.7
Zone 7 Variable Costs	$7,887,200
Zone 7 Connection Charges	$14,200
Total Zone 7 Expense	$7,901,400
Mingoia Leased Well Quantity (KCcf)	90.7
Total Mingoia Lease Well Expense	$14,500
Total Purchased Water Expense	$7,915,900

DRA recommends that the Commission adopt DRA's Test Year 2011 Purchased Water expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Purchased Water	$7,915,900	$7,776,200	-$139,700 or -1.8%

(b) GROUNDWATER EXTRACTION CHARGES

CWS' Livermore District does not incur any groundwater extraction charges.

(c) PURCHASED POWER

To estimate its Purchased Power expense, CWS first multiplies its estimated kilowatt-hours per hundred thousand cubic feet (KWh/KCcf) of water produced by its estimated annual water production quantity (in KCcf).[9] The resulting energy requirement (in KWh) is then multiplied by the average cost per KWh purchased from PG&E.[10]

As mentioned earlier, the Livermore District's water production comes from its own wells, a leased well and Zone 7 purchased water. The District's total

[9] CWS uses KWh/KCcf and unit cost quantities from the District's last GRC. As stated in CWS' July 1, 2009 General Report, projected changes in the unit cost of purchased power are not included; this expense is offsettable by an advice letter filing.

[10] Ibid.

Purchased Power expense is the sum of purchased power expense estimates for well pumping and booster pumping. CWS calculates power expense for well pumping and booster pumping separately because the two operations have different efficiencies and unit cost profiles.

DRA agrees with CWS method of estimating Purchased Power expense for this District. DRA's expense estimates reflect its water supply forecasts presented in Chapter 2 of this Report. DRA's estimates are higher than CWS' due to DRA's higher water supply forecasts.

DRA recommends that the Commission adopt DRA's Test Year 2011 Purchased Power expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Purchased Power	$594,300	$590,300	-$4,000 or -0.7%

(d) PURCHASED CHEMICALS

Purchased Chemicals expense is a function of the cost of chemicals and the estimated water supply requirement. CWS develops its Test Year estimate by multiplying the inflation-adjusted, recorded purchased chemical cost per unit of production by the total annual water production forecast (from applicable sources).

For the Test Year's estimate, CWS uses the average cost from the most recent two years (2007-2008). In its response to DRA's data request, CWS explains that the use of the two-year average is necessary to reflect the change in disinfection method at Well 31-01 and Station 20. [11]

DRA agrees with CWS' method of estimating this District's Purchased Chemicals expense and the use of 2007 and 2008 recorded costs to develop its estimated purchased chemical unit cost. DRA's total Purchased Chemicals expense estimates reflect its water production forecasts recommended in Chapter 2 of this Report (same as CWS' forecasts).

[11] CWS' response to DRA's data request PPM-005.

DRA recommends no change to CWS' Test Year 2011 Purchased Chemicals expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Purchased Chemicals	$59,700	$59,700	$0 or 0%

(e) OPERATIONS PAYROLL

For Operations Payroll expense estimates, please refer to DRA's Payroll Report. DRA's Operations Payroll expense estimate for Test Year 2011 is included in Table 3-1 at the end of this Chapter.

(f) POSTAGE

CWS' annual postage costs for the District are a function of: (1) postage rates; (2) the number of customers; and (3) the number of mailings to each customer per year. In this GRC, CWS assumes the number of mailings per customer remains constant over the forecast period. However, CWS applies a 4.8% increase in postage cost per customer in 2009 to account for a May 11, 2009 rate increase implemented by the United States Postal Service ("USPS"). For 2010-2012, CWS escalates the postage cost per customer by those years' composite escalation factors.

DRA notes that the 4.8% increase in postage rate is applicable to first-class mailings. Since the CWS' customer mailings would qualify for USPS bulk mailing rates, applying the 4.8% in first-class rate increase to the forecast does not accurately reflect CWS' expected postage cost increase. DRA recommends using a lower 3.2% increase as an approximation of CWS' 2009 increase in postage cost per customer. The 3.2% increase is the average increase of USPS bulk mailing rates effective on May 11, 2009.

Additionally, DRA does not believe that escalation factors should be automatically applied to 2010-2012 postage expense forecasts. Annual rate increases are not at all certain. For example, according to the Associated Press on

October 19, 2009, "Postmaster General John E. Potter announced in an internal postal memorandum that there will be no rise in prices next year [2010] for products in which the agency dominates the market, such as first-class mail." Bulk-rate mailings fall into this same USPS product category and, therefore, are not expected to have a rate increase in 2010. For that reason, DRA recommends that escalation factors *not* be applied to the District's postage expense forecasts.

In addition to the above two adjustments to CWS' calculations, DRA also reflects its forecasted total number of customers presented in Chapter 2 of this Report. DRA recommends that the Commission adopt DRA's Test Year 2011 Postage expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Postage	$75,600	$80,100	$4,500 or 6.0%

(g) OPERATIONS TRANSPORTATION

CWS develops the District's total Transportation expense estimate in aggregate for (1) Operations, (2) Maintenance, and (3) Administration and General (A&G). The total estimate is then allocated among these three areas by the average distribution over the last recorded period, which is 2008.

CWS develops its total transportation expense estimate based on recorded 2008 costs adjusted for inflation. Additionally, if the forecast period includes a request for additional vehicle(s), CWS increases the transportation expense estimate by the ratio of additional vehicle(s) to total number of existing vehicles. CWS does not request any additional vehicles for this District in this GRC.

DRA's estimates are based on a five-year (2004-2008) average, instead of CWS' proposed 2008-only data. DRA uses CWS' allocation methodology to determine Transportation expense estimates for Operations, Maintenance and A&G.

DRA recommends that the Commission adopt DRA's Test Year 2011 Transportation expense estimates in Table 3-B.

Table 3-B. Transportation Expense Estimates for Livermore District.

Transportation Expenses:	DRA	CWS	CWS Exceeds DRA
Operations	$93,000	$113,400	$20,400 or 22.0%
Maintenance	$46,400	$56,600	$10,200 or 22.0%
A&G	$1,300	$1,600	$300 or $22.0%
Total:	$140,700	$171,600	$30,900 or 22.0%

(h) UNCOLLECTIBLES

CWS estimates its Uncollectibles expense for the Livermore District by applying the average uncollectible rate from its most recent five-year period (2004-2008) to its revenue estimates. The uncollectible rate from each recorded year is calculated by dividing total recorded uncollectible expense by total recorded revenue. DRA reviewed the Livermore District's recorded uncollectible rates from the most recent six years and finds the historical five-year average rate to be a reasonable estimate for the forecast period. DRA's estimates for total Uncollectibles however reflect DRA's revenue projections presented in Chapter 2 of this Report.

DRA recommends that the Commission adopt an uncollectible rate of 0.*22278%* for Test Year 2011 for the Livermore District. DRA's recommended Uncollectibles expense total is shown in Table 3-1 at the end of this Chapter.

(i) SOURCE OF SUPPLY

CWS' Source of Supply expense estimates for the Livermore District are based on average recorded annual expenses from the most recent five years (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Source of Supply expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Source of Supply	$100	$100	$0 or 0%

(j) PUMPING

Pumping expenses include labor, miscellaneous, and fuel expenses. CWS' Pumping expense estimates for the Livermore District are based on average recorded annual expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Pumping Expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Pumping	$50,700	$50,700	$0 or 0%

(k) WATER TREATMENT

CWS' Water Treatment expense account includes well sampling, inorganic laboratory, bacterial laboratory, outside lab and miscellaneous expenses. CWS' Water Treatment expense estimates for the Livermore District are based on average recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Water Treatment expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Water Treatment	$35,900	$35,900	$0 or 0%

(l) TRANSMISSION AND DISTRIBUTION

CWS' Transmission and Distribution ("T&D") expense account includes supervision and engineering, flushing, T&D lines, turn on's and turn off's, customer installation and miscellaneous expenses. CWS' T&D expense estimates for the Livermore District are based on average recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 T&D expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
T&D	$67,700	$67,000	$0 or 0%

(m) CUSTOMER ACCOUNTING

CWS' Customer Accounting expense estimates for the Livermore District are based on average recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Customer Accounting expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Customer Accounting	$95,300	$95,300	$0 or 0%

(n) CONSERVATION

For Conservation expense estimates, please refer to DRA's Conservation Report. DRA's Conservation expense estimate for Test Year 2011 is included in Table 3-1 at the end of this Chapter.

2) MAINTENANCE EXPENSES

(a) MAINTENANCE PAYROLL

For Maintenance Payroll expense estimates, please refer to DRA's Payroll Report. DRA's Maintenance Payroll expense estimate for Test Year 2011 is included in Table 3-1 at the end of this Chapter.

(b) MAINTENANCE TRANSPORTATION

Section C.1.g of this Chapter presents DRA's analysis and recommendations on total transportation expenses for CWS' Livermore District. DRA recommends that the Commission adopt DRA's Test Year 2011 Maintenance Transportation expense estimate presented in Table 3-B (see Section C.1.g).

(c) STORES

CWS' Stores expense estimates for the Livermore District are based on average recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' estimated Test Year 2011 Stores expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Stores	$23,700	$23,700	$0 or 0%

(d) CONTRACTED MAINTENANCE

CWS' Contracted Maintenance expense estimates for the Livermore District are based on recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Contracted Maintenance expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Contracted Maintenance	$246,900	$246,900	$0 or 0%

D. CONCLUSION

DRA recommends that the Commission adopt its O&M expense estimates for the Livermore District as presented herein.

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

OPERATION & MAINTENANCE EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
At present rates				
Operating Revenues	16,749.8	17,528.3		
Uncollectible rate	0.22278%	0.22278%		
Uncollectibles	37.3	39.0	1.7	4.6%
Operation Expenses				
Purchased Water	7,915.9	7,776.2	(139.7)	-1.8%
Replenishment Assessment	0.0	0.0	0.0	0.0%
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%
Purchased Power	594.3	590.3	(4.0)	-0.7%
Purchased Chemicals	59.7	59.7	0.0	0.0%
Payroll	590.1	691.9	101.8	17.3%
Postage	75.6	80.1	4.5	6.0%
Transportation	93.0	113.4	20.4	21.9%
Uncollectibles	37.3	39.0	1.7	4.6%
Source of Supply	0.1	0.1	0.0	0.0%
Pumping	50.7	50.7	0.0	0.0%
Water Treatment	35.9	35.9	0.0	0.0%
Transmission & Distribution	67.7	67.7	0.0	0.0%
Customer Accounting	95.3	95.3	0.0	0.0%
Conservation	181.0	731.2	550.2	304.0%
Total Operation Expenses	9,796.6	10,331.5	534.9	5.5%
Maintenance Expenses				
Payroll	213.5	250.4	36.9	17.3%
Transportation	46.4	56.6	10.2	22.0%
Stores	23.7	23.7	0.0	0.0%
Contracted Maintenance	246.9	246.9	0.0	0.0%
Total Maintenance Expense	530.5	577.6	47.1	8.9%
Total O & M Expenses (incl uncoll)	10,327.1	10,909.0	581.9	5.6%
At proposed rates				
Operating Revenues	20,698.7	20,445.0		
Uncollectible rate	0.22278%	0.22278%		
Uncollectibles	46.1	45.5		
Total O & M Expenses (incl uncoll)	10,335.9	10,915.5	579.6	5.6%

CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES

A. INTRODUCTION

This Chapter presents DRA's recommended expense levels for California Water Service Company's ("CWS") 2011 Test Year Administrative and General ("A&G") expenses for the Livermore District.

The categories of A&G expenses cover general expenses including Payroll, Transportation Expenses, Rent, Administration Charges Transfer, Workers' Compensation, Nonspecific Expenses, Amortization of Limited Term Investments and Dues and Donations Adjustment. Table 4-1 presents a comparison of total expense estimates for Test Year 2011.

DRA analyzed CWS' exhibits, supporting workpapers, CWS' responses to DRA's data requests, information provided in meetings, phone conversations, e-mails, and CWS' methods of estimating A&G expenses.

B. SUMMARY OF RECOMMENDATIONS

DRA's estimated total for A&G expenses is $927,800 for Test Year 2011. CWS' estimate for the same time period is $1,045,500. CWS' estimate exceeds DRA's estimate by $117,700, or 12.7%. DRA's estimated total for A&G expenses is $938,000 for 2012. CWS' estimate for the same time period is $1,069,400. CWS' estimate exceeds DRA's estimate by $131,400 or 14.0%. The difference between the forecasted expense levels of DRA and CWS is the result of: 1) DRA's 2011 Test Year estimates of the various A&G activity expenses; 2) account by account adjustments; 3) different methodologies; and 4) the use of the May 2009 Energy Cost of Service Branch escalation factors memo to derive the estimates as discussed below.

C. DISCUSSION

1) Methodology

DRA conducted an independent analysis of CWS' workpapers and methods of estimating the A&G expenses. DRA analyzed CWS' application and exhibits, supporting workpapers, CWS' data request responses, information provided in meetings, field trips to CWS site locations, telephone conversations and e-mails. In general, DRA uses a five-year (2004-2008) average to derive its A&G expense estimates where it had differences with CWS. DRA also removes unusual expenses recorded in certain years to arrive at a different total than CWS, in particular for Nonspecific Expenses. DRA applies its escalation factors to all A&G accounts.

2) Payroll

For A&G payroll expense, please refer to DRA's Payroll Report.

3) Employee Benefits

There were no methodical differences between DRA and CWS in calculating employee benefits. DRA's estimates for the accounts below are based on (1) total payroll dollars, and (2) total number of employees. CWS' estimates are also a function of these two factors. Per employee unit benefit costs were developed by Milliman[12] and are based on a variety of actuarial assumptions. The underlying assumptions, except for the escalation factors, were accepted by DRA. Any differences are, therefore, attributable to different escalation factors and differing estimates for total company payroll and total General Office and district employees for 2011 and 2012.

[12] Milliman is CWS' Pensions and Benefits actuarial consultants.

DRA recommends the following amounts (thousands of dollars) for Account 795, Pensions and Benefits:

	DRA		CWS	
	2011	**2012**	**2011**	**2012**
Total Account 795	$738.4	$742.6	$811.8	$824.5

All company benefits are accounted for in general operations and allocated to each of the districts using the four-factor method of allocation. In general benefit costs are a function of employee payroll dollars, and/or the number of employees. The following is a breakdown of the sub-accounts included in the total Account 795 Pensions and Benefits:

(a) Account 7951-1 Retirement Savings Plan.

CWS provides employees with a 401(k) program and matches 50% of employee contributions up to 8% of payroll or the statutory contribution limit, whichever is less. Therefore, CWS' maximum contribution is 4% of company payroll. However, not all employees participate in the program. Based on actual participation levels, CWS' matching contribution during the last five years, was approximately 3%. This rate was used by CWS to forecast the test year amount, and is in line (or comparable) to those offered by other California utilities.[13]

DRA estimated the test year contribution based on the five-year average contribution percentage of 3%, which was multiplied by DRA's estimate of total company payroll (in 2011 and 2012).

[13] The 3% rate is in line with the 401(k) plans offered by San Jose Water, PG&E, Southern California Edison, and Sempra Energy. See the Milliman analysis, CWS General Report, Tab 12.

(b) Account 7951-2 Retirement Fund.

CWS' pension funding estimate is based on an actuarial forecast from Milliman. The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees to arrive at the test year's estimate. DRA and CWS' estimates differ because of different escalation factors and different estimates for total employees in the General Office and all districts.

The Milliman forecast is based on certain assumptions such as population growth, payroll changes, and salary adjustments. The Milliman forecast also assumes a long term rate on plan assets of 6.75%, and a discount rate of 5.75% for the years 2011 through 2013. CWS follows FASB[14] Statement of Financial Accounting Standards (SFAS) No. 87, as modified by SFAS 132 and SFAS 158.[15] CWS has followed SFAS 87 since it became effective in 1987. Prior to 1987, CWS pension costs equaled the cash contributions to the pension plan determined in accordance with ERISA.[16] The test year projections are based on Milliman's actuarial valuation as of January 1, 2009 for determining the Net Periodic Benefit Cost under SFAS 87. The underlying pension costs assumptions were accepted by DRA.

DRA was persuaded that CWS had taken appropriate steps to mitigate the ratepayer impact of Plan costs. Further, CWS undertook the following measures to avail itself of the benefits provided under (a) The Pension Protection Act of

[14] Financial Accounting Standards Board.
[15] CWS' response to DRA Data Request JRC-2, Q.7.
[16] Employment Retirement Income Security Act, or Federal law.

2006, (PPA) and (b) The Worker, Retiree and Employer Recovery Act (WRERA) of 2008:[17]

(i) CWS fully complied with PPA and WRERA. CWS modified the actuarial cost method for purposes of determining the minimum funding requirement to the Unit Credit method. CWS also adopted the use of the "3-segment" interest rates (for the 2008 minimum funding requirement) and the "full yield curve" (for the 2009 minimum funding requirement). The actuarial valuations for 2008 and 2009 have shown that the contributions by CWS will satisfy the minimum funding requirements as modified by PPA and WRERA.

(ii) In December 2008, CWS made an election to voluntarily reduce its carryover balance (i.e., pre-PPA credit balance) of $1,537,616 as of January 1, 2008 to $0, so that such amount could be included in its plan assets. This was done in order to improve the plan's funded percentages under PPA. In 2009, CWS elected to use the "full yield curve" to determine the funding target under PPA. This increased the plan's funded percentage for 2009.

(c) Account 7952- Group Health Insurance.

CWS administers its own (self-insured) employee health care plan. The cost of health insurance is based on actual claims experience and not outside premium payments. The plans include Medical, Dental and Vision care. Further, the plans are on the PPO model where employees are encouraged to use network health care providers in order to minimize costs. CWS' estimate is based on an actuarial forecast from Milliman and includes employee contributions of $125 per month. The Milliman forecast assumes that overall medical cost inflation will

[17] CWS' response to DRA Data Request JRC-2, Q.1.

continue to be 10% annually for the forecast period.[18] The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees. DRA and CWS' estimate differs because of different escalation factors and different estimates for total employees in the General Office and all districts. The underlying forecast assumptions were accepted by DRA.

(d) Account 7952-1 Retiree Group Health Insurance.

CWS administers its own (self-insured) retiree health care plan. Therefore, costs for these plans are based on claims experience, not outside premium payments. The plans are on the PPO model, where employees are encouraged to use network providers in order to minimize costs. Further, retirees pay a monthly premium of $300 per person (a retiree and spouse pay $600 per month). This rate decreases to $144 per person when there is other coverage such as Medicare.

The retiree plan is funded in advance in accordance with SFAS 106, which requires that annual funding of the plan be based on an actuarial analysis of the expected future expense arising during the employee service time. CWS' estimate is based on an actuarial forecast from Milliman. The Milliman forecast assumes that overall medical cost inflation will continue to be 10% annually for the forecast period. The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees. DRA and CWS' estimate differs because of different escalation factors and estimates for total employees in the General Office and all districts. The underlying forecast assumptions, except for the escalation factors, were accepted by DRA.

[18] Dental and Vision care inflation is forecasted at 5% each for 2011 through 2013.

4) Transportation Expense

DRA addresses Transportation Expense in Chapter 3, Operations and Maintenance Expenses, of this Report. DRA's estimate for transportation expenses is $1,300 for Test Year 2011; CWS' estimate for the same time period is $1,600 or 23.1% greater than DRA's. DRA's estimate for 2012 is $1,400; CWS' estimate for the same period is $1,700, or 21.4% higher than DRA's.

5) Rent

CWS estimates rental expense of $29,400 for Test Year 2011 and $30,200 for 2012.[19] DRA has verified the information regarding the Company's rental expense, and recommends adopting this estimate.

6) Administration Charges Transfer

Administration Charges Transfer represents credits for unregulated activity. CWS' estimate of ($98,300) for Test Year 2011, and ($98,300) for 2012, for Administration Charges Transferred based upon the last recorded year.[20] DRA reviewed CWS' workpapers and recommends adopting these estimates.

7) Workers Compensation

CWS' estimates of $50,600 in Test Year 2011, and $11,000 in 2012 for Workers Compensation is based on actuarial expectations conducted by actuaries at Milliman USA ("Milliman"). An assumption embedded in the estimate is a provision to account for Workers' Compensation including expected future payments from current employment.[21] In other words, instead of basing the costs on the well-established "pay-as-you-go methodology" that the Commission has

[19] Refer to Report on the Results of Operation and Prepared Testimony for the Chico District, Chapter 6.
[20] Refer to CWS' Formal Application Workpapers for the Chico District, Table 6-B.
[21] Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

consistently utilized, CWS proposes changing to an accrual basis and including the amortization of past liabilities for which payments have not yet been made.

In the prior rate case, CWS requested the same methodology change. DRA disagreed and calculated a percentage reduction at the General Office level based on the 2002-2006 average for the prior Test Year 2008-2009. The Commission similarly applied DRA's recommended reduction to all the districts in that case. In Decision (D.) 08-07-008 (pages 25-26, Section 4.7 on Workers' Compensation), the Commission upheld the use of the "pay-as-you-go methodology" for accounting for Workers' Compensation insurance costs.

For the current rate case, DRA continues to disagree with CWS' proposed change in recovery methodology and recommends continuing the "pay-as-you-go methodology" for recovering this cost. To put in perspective CWS' current proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus General Office, CWS' total proposed Workers' Compensation is $2,747,250. This amount is almost triple the total 2008 recorded amount of $992,800 and about 70% higher than the 2004-2008 five year average (in 2009 dollars) of $1,643,900.

DRA reviewed the recorded amounts for Workers' Compensation for this District. DRA finds the recorded amounts for 2004 to 2008 more reflective of the "pay-as-you-go methodology" for accounting for Workers Compensation that the Commission approved in D. 08-07-008. DRA then took a five-year average of these recorded amounts, escalated the five-year average using DRA's labor escalation factors to derive its Test Year 2011 and 2012 forecasts of $42,500, for both years respectively for the Livermore District.

DRA recommends adopting its estimate of $42,500 for Workers Compensation for the Test Year for this District.

8) Nonspecific Expenses

Nonspecific Expenses generally represent miscellaneous administrative and general expenditures. The Nonspecific Expenses account contains various sub-accounts. However, CWS does not provide estimated amounts for each sub-account for future years. Instead, it provides a compound figure for Nonspecific Expenses based on historical spending levels in all sub-accounts. CWS' Nonspecific Expenses estimate of $45,000 for Test Year 2011 is based on a five-year average. DRA reviewed all sub accounts within Nonspecific expenses and adjusted some amounts for the years 2004 through 2008 under the following subaccounts: Account 792601 – Travel Meals Expense by $2,767, Account 799500 – Miscellaneous Expense by $3,235 and Account 799501 - Employee Moving Expense by $32,990 in 2008. DRA then escalated its five-year average using DRA's composite escalation factors to derive its 2011 forecast. DRA recommends adopting its Nonspecific Expenses estimates of $45,000 and $46,200 for Nonspecific Expenses for Test Year 2011 and 2012 respectively. DRA's reasons for these adjustments are described below:

(a) Account 792601 - Travel Meals Expense

DRA identified expenditures in 2004 for lunch / celebration day. DRA identified in 2005 expenditures for reimbursement for Cal Water Golf. DRA identified in 2006 reimbursement for employee celebration day. In 2007 DRA identified expenditures for an employee Retirement Luncheon, another employee celebration day, and BBQ and party items. DRA believes that these expenditures are of no benefit to ratepayers, and removes them from DRA's estimate. DRA used a five-year average of recorded years 2004 to 2008 with the cost of the previously mentioned items removed.

(b) Account 799500 – Miscellaneous General Expense

DRA identified expenditures in 2004, 2005, 2006, 2007, and 2008 for Retirement Parties, Retirement luncheons, Retirement Gifts, uniforms for a Basketball Team, Employee Celebration day, and The Livermore Follies. DRA believes that these expenditures are of no benefit to ratepayers, and removes them from DRA's estimate. DRA used a five-year average of recorded years 2004 to 2008 with the cost of the previously mentioned items removed.

(c) Account 799501 – Employee Moving Expense

DRA identified expenditures for moving expenses in 2007 for moving an employee four times for $5,868 each time, or $23,472 dollars, and an additional expenditure of $3,650 for sale of home expenses. DRA believes that the previously mentioned expenditures are of no benefit to ratepayers, and removes them from DRA's estimate. DRA used a five-year average of recorded years 2004 to 2008 with the cost of the previously mentioned items removed.

9) Amortization of Limited Term Investment

This expense pertains to the amortization of intangible assets, such as capital planning studies. CWS estimates $10,700 for the Amortization of Limited Term Investment. CWS bases its estimate on the general method for this expense shown on CWS' amortization schedule. DRA reviewed this account and recommends adopting CWS' estimate.

10) Dues and Donations Adjustment

The Dues and Donations Adjustment represents CWS' adjustment of non-professional dues paid historically, for ratemaking purposes. CWS' estimate for Dues and Donations Adjustment is ($3,500). DRA has reviewed CWS' workpapers and recommends adopting CWS' estimate.

D. CONCLUSION

DRA recommends that the Commission adopt DRA's A&G Expenses for the Livermore District.

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
~~At present rates~~				
Oper. Rev. less uncoll.	16,712.5	17,528.3		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	162.3	190.3	28.0	17.3%
Benefits	738.4	811.8	73.4	9.9%
Transportation Expenses	1.3	1.6	0.3	23.1%
Rent	29.4	29.4	0.0	0.0%
Admin Charges Trsf	(98.3)	(98.3)	0.0	0.0%
Worker's Compensation	42.5	50.6	8.1	19.1%
Nonspecifics	45.0	52.9	7.9	17.6%
Amort of Limited Term Inv.	10.7	10.7	0.0	0.0%
Dues & Donations Adjustment	(3.5)	(3.5)	0.0	0.0%
Total A & G Expenses	927.8	1,045.5	117.7	12.7%
(incl. local Fran.)	927.8	1,045.5	117.7	12.7%
At proposed rates				
Oper. Rev. less uncoll.	20,652.6	20,445.0		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses	927.8	1,045.5	117.7	12.7%
(incl. local Fran.)	927.8	1,045.5	117.7	12.7%

CHAPTER 5: TAXES OTHER THAN INCOME

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Taxes Other Than Income for the Livermore District of California Water Service's (CWS) Test Year 2011 General Rate Case. The category of Taxes Other Than Income is comprised of ad valorem (property taxes), business license fees, local franchise fees, and payroll taxes.

B. SUMMARY OF RECOMMENDATIONS

Differences between CWS' and DRA's estimates for Taxes Other Than Income are primarily due to differences in revenue, plant and payroll estimates. The methodologies used by CWS in estimating future taxes and fees are detailed below. Anywhere DRA has made adjustments to improve the consistency or accuracy of estimates has also been noted below.

C. DISCUSSION

1) AD VALOREM TAXES

CWS estimates future ad valorem taxes using the actual ad valorem tax percentage from the last recorded year. This percentage is applied to the following year's estimated net total of utility property accounts.[22] The pro-forma ad valorem estimate is the arithmetic average of the two years. DRA accepts this methodology and notes that differences between CWS and DRA estimates are due to differences in estimations of future plant.

[22] Net Total of Property = plant + materials & supplies + construction work in progress + present value of advances – advances & contributions – deferred income tax

2) BUSINESS LICENSE and LOCAL FRANCHISE FEES

The Livermore District pays a 1% business license fee on revenue generated within the City of Livermore. The Livermore District does not pay franchise tax. DRA accepts the CWS' estimates for the business license fee and notes that any differences are the result of different estimates of future revenue.

3) PAYROLL TAXES

CWS estimates future payroll taxes using projected payroll amounts and the effective tax rates from the last recorded year. The three components of payroll taxes are Federal Insurance Contributions (FICA), Federal Unemployment Insurance (FUI) and State Unemployment Insurance (SUI). All three components have statutory limits governing the maximum percentage that can be collected from employers (*see table, below*).

PAYROLL TAXES		2009 MAXIMUM	EXPLANATORY NOTES
FICA	Social Security Tax	6.2%	Social Security Tax is 6.2% applied to only the first $106,800 of an employee's salary.
	Medicare Tax	1.45%	
FUI Tax		0.8%	Federal Unemployment Tax is 6.2% reduced by an offset credit of up to 5.4% for a total of 0.8% on the first $7,000 of employee wages ($56 per employee).
SUI Tax (CA)		6.3%	State Unemployment Taxes vary by company from 1.5% to 6.2% plus an Employment Training Tax Rate of 0.1% for a maximum tax percentage of 6.3%.

In general, DRA accepts the methodology utilized by CWS to estimate future payroll taxes. An adjustment was made by DRA to the imputed FICA percentage used by CWS for the Livermore District (8.80%) to coincide with the maximum tax (7.65%) that can be collected for the combined Social Security and Medicare Taxes (see table above). All other differences between DRA and CWS estimates result from differences in estimates of future payroll.

D. CONCLUSION

DRA recommends Commission adoption of DRA's estimates of Taxes Other Than Income that are presented in Table 5-1.

TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Ad Valorem taxes	301.6	346.2	44.6	14.8%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (CWS prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	78.3	104.8	26.5	33.8%
Business License (pres rates)	168.6	166.5	(2.1)	-1.2%
Business License (CWS prop rates)	196.6	194.2	(2.4)	-1.2%
Taxes other than income (present rates)	548.5	617.5	69.0	12.6%
Taxes other than income (CWS proposed rates)	576.5	645.2	68.7	11.9%
State Tax Depreciation	2,092.7	2,302.7	210.0	10.0%
Transp. Dep. Adj.	(34.0)	(37.2)	(3.2)	9.4%
State Tax Deduct(pres rates)	2,058.7	2,265.5	206.8	10.0%
State Tax Deduct (CWS prop rates)	2,058.7	2,265.5	206.8	10.0%
Fed. Tax Depreciation (pres/prop rates)	1,710.0	1,881.6	171.6	10.0%
State Income Tax (pres. rates)	45.9	(41.1)	(87.0)	-189.4%
State Income Tax (CWS prop rates)	391.8	213.7	(178.1)	-45.5%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	(18.7)	0.0	18.7	-100.0%
DPAD (CWS prop. Rates)	(96.4)	(236.5)	(140.1)	145.2%
Fed. Tax Deduct.(pres rates)	1,737.2	1,840.5	103.3	5.9%
Fed. Tax Deduct (CWS prop rates)	2,005.3	1,858.8	(146.5)	-7.3%

CHAPTER 6: INCOME TAXES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Income Taxes for the Livermore District of California Water Service (CWS) Test Year 2011 General Rate Case. In developing its recommendations, DRA reviewed the reports, workpapers, and data responses of CWS in conjunction with information obtained from the California Franchise Tax Board and the Internal Revenue Service.

B. SUMMARY OF RECOMMENDATIONS

The majority of the differences between CWS and DRA estimates of Income Taxes are attributable to differences in estimated revenue, expenses, and rate base. Anywhere DRA has made adjustments to the estimating methodology used by CWS is detailed below. The four areas in which DRA made adjustments to CWS calculations for Livermore pertain to the: (1) federal deduction of the California Corporate Franchise Tax, (2) California Corporate Franchise Tax total percentage, (3) calculation of the interest expense deduction, and (4) domestic production activities deduction.

C. DISCUSSION

1) DRA ADJUSTMENTS

(a) Federal Deduction of California Corporate Franchise Tax (CCFT)

D.89-11-058, issued in November of 1989, required that the prior year's CCFT be used as the deduction for calculation of test year federal income taxes. As discussed throughout the decision, companies at that time were required to pay

estimated California taxes one year in advance.[23] D.89-11-058 corrected the timing difference between when companies had previously paid California taxes and when they had realized such payment as a deduction for federal income taxes.

Since 1989, the California Tax Code has changed so that corporations are no longer required to make estimated CCFT payments to the state one year in advance. In fact, California tax law now requires corporations to compute an estimated tax "upon the basis of the net income for that taxable year."[24] As such, DRA recommends using the current year's CCFT as a deduction in the current year's calculation of federal income taxes. Differing from D.89-11-058 yet more representative of current California tax practice, DRA's methodology provides a more accurate estimate of a utility's assumed tax consequences and revenue requirements. More importantly, consistent with long-standing regulatory tradition and Generally Accepted Accounting Procedures (GAAP), the DRA methodology more closely adheres to the fundamental "matching principle," where costs incurred in a given period should be matched against the revenue or benefits received in the same period.

(b) California Corporate Franchise Tax Total Percentage

Referencing D.84-05-036 yet failing to cite the specific ordering paragraph, section, or discussion, CWS added six-basis points to the CCFT percentage used to estimate state taxes for test year and escalation years. Through data requests, review of Commission decisions, and personal interviews, DRA attempted to find some justification for CWS' inclusion of an additional 0.06% in state tax estimates. Unable to substantiate the validity of this addition, DRA removed the percentage, which reduced CCFT estimates by 0.06%.

[23] California Revenue and Taxation Code, Part 11, Chapter 2, Article 2, Section 23151(f)(2)
[24] Ibid

(c) Calculation of the Interest Expense Deduction

A formula error in CWS' workpapers for calculating the Interest Expense Deduction resulted in Working Cash being subtracted from Rate Base. DRA has corrected this error in the calculation of the deduction for Livermore. The recommended Interest Expense Deduction now equals Rate Base (including working cash) multiplied by the current CWS weighted-average-cost-of-debt (3.16%).[25]

(d) Domestic Production Activities Deduction (DPAD)

Beginning in taxable year 2010, Section 199 of the IRS Code allows a deduction equal to 9% of a taxpayer's qualified production activities income (QPAI). The calculation of this deduction by CWS for Livermore assumes that all income is from qualified production activities. This assumption results in an overestimation of the allowable deduction and an underestimation of the district's assumed taxes. DRA has corrected the DPAD calculation for Livermore to incorporate only those qualifying activities into the deduction. DRA multiplies the deduction calculated by CWS by the percentage of water produced[26] in the district (a qualifying activity).

2) GENERAL INCOME TAX CALCULATIONS

In calculating income taxes, both DRA and CWS subtract common expenses from estimated revenue. For the calculation of state taxes, CWS has calculated tax depreciation amounts to reflect the required flow-through of deferred tax benefits, while federal tax depreciation amounts reflect the requirements of normalization.

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[25] D.09-05-019: Base Year 2009 Cost of Capital for the three large multi-district Class A Water Utilities

[26] "produced water" and "purchased water" are the two categories of "total water" used to calculated DPAD

This methodology is consistent with the requirements of the Economic Recovery Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982, and the Tax Reform Act of 1986.

D. CONCLUSION

DRA recommends Commission adoption of DRA's estimates of Income Taxes that have been calculated and presented in Tables 6-1 and 6-2.

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	16,749.8	17,528.3	778.5	4.6%
Deductions:				
O & M expenses	10,327.1	10,909.0	581.9	5.6%
A & G expenses	927.8	1,045.5	117.7	12.7%
G. O. Prorated expenses	1,850.7	2,494.2	643.5	34.8%
Exclude GO Book Depreciation	(246.8)	(286.8)	(40.0)	16.2%
Taxes not on Income	548.5	617.5	69.0	12.6%
Transportation Deprec Adj	(34.0)	(37.2)	(3.2)	9.4%
Interest	764.1	945.5	181.5	23.8%
Income before taxes	2,612.4	1,840.5	(771.9)	-29.5%
~~Calif. Corp. Franchise Tax~~				
State Tax Deductions	(2,092.7)	(2,302.7)	-210.0	10.0%
Taxable income for CCFT	519.8	(462.2)	(982.0)	-188.9%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.3)	(0.3)	0.0%
CCFT	45.9	(41.1)	(87.0)	-189.4%
~~Federal Income Tax~~				
Tax Depreciation	1,710.0	1,881.6	171.6	10.0%
State Corp Franch Tax	45.9	(41.1)	(87.0)	-189.4%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	856.5	(0.0)	(856.5)	-100.0%
Domestic Prod. Activities Ded.	(18.7)	0.0	18.7	-100.0%
Adjusted Taxable Income	837.8	(0.0)	(837.9)	-100.0%
FIT Rate	35.00%	35.00%		
FIT	293.2	(0.0)	(293.3)	-100.0%
Investment Tax Credit	4.1	4.1	0.0	0.0%
Total FIT	289.1	(4.1)	(293.3)	-101.4%
Total FIT & CCFT	335.1	(45.1)	(380.2)	-113.5%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	20,698.7	20,445.0	(253.7)	-1.2%
Deductions:				
O & M expenses	10,335.9	10,915.5	579.6	5.6%
A & G expenses	927.8	1,045.5	117.7	12.7%
G. O. Prorated expenses	1,850.7	2,494.2	643.5	34.8%
Exclude GO Book Depreciation	(246.8)	(286.8)	(40.0)	16.2%
Taxes not on Income	576.5	645.2	68.7	11.9%
Transportation Deprec Adj	(34.0)	(37.2)	(3.2)	9.4%
Interest	764.1	945.5	181.5	23.8%
Income before taxes	6,524.5	4,723.0	(1,801.5)	-27.6%
Calif. Corp. Franchise Tax				
State Tax Deductions	(2,092.7)	(2,302.7)	-210.0	10.0%
Taxable income for CCFT	4,431.9	2,420.3	(2,011.6)	-45.4%
CCFT Rate	8.84%	8.84%		
Additonal Tax per D.84-05-036	0.0	(0.3)	(0.3)	0.0%
CCFT	391.8	213.7	(178.1)	-45.5%
Federal Income Tax				
Tax Depreciation	1,710.0	1,881.6	171.6	10.0%
State Corp Franch Tax	391.8	213.7	-178.1	-45.5%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	4,422.8	2,627.8	(1,795.0)	-40.6%
Domestic Prod. Activities Ded.	(96.4)	(236.5)	-140.1	145.2%
Adjusted Taxable Income	4,326.3	2,391.3	-1935.1	-44.7%
FIT Rate	35.00%	35.00%		
FIT	1,514.2	837.0	(677.2)	-44.7%
Investment Tax Credit	4.1	4.1	0.0	0.0%
Total FIT	1,510.1	832.9	(677.2)	-44.8%
Total FIT & CCFT	1901.9	1046.6	(855.3)	-45.0%

CHAPTER 7: UTILITY PLANT IN SERVICE

A. INTRODUCTION

Tables 7-1 and 7-2 at the end of this Chapter show DRA's and CWS' estimates for the Livermore District Plant in Service for Test Year 2011 and Escalation Year 2012.

DRA reviewed and analyzed CWS' testimony, application, Minimum Data Requirements, workpapers, capital project details, estimating methods, Urban Water Management Plan ("UWMP"), Water Supply & Facilities Master Plan ("WS&FMP"), and responses to various DRA data requests. DRA also conducted a field investigation of most of the proposed specific plant additions before making its own independent estimates including adjustments where appropriate. Important and significant differences between DRA and CWS' estimates of specific plant additions are attributed to the items listed in Table 7-B.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that: 1) plant additions for seven specific projects in 2009 be disallowed or adjusted; 2) plant additions for six specific projects in 2010 be disallowed or adjusted; 3) plant additions for eleven specific projects in 2011 be disallowed or adjusted; 4) plant additions for five specific projects in 2012 be disallowed; 5) plant additions for CWS' main, service & hydrant replacement program be adjusted to reflect DRA's estimates; 6) plant additions for carryover projects be adjusted to reflect DRA's estimates; and 7) plant additions for non-specifics in 2009 through 2012 be adjusted to reflect DRA's escalation factors. Based on these recommendations, DRA's estimates for the 2009, 2010, 2011 and 2012 plant additions are $2,389,900, $1,348,600, $1,395,100, and $925,000, respectively versus CWS' proposed amounts of $4,819,100, $4,092,500, $2,228,400, and $4,220,900, respectively for the same years.

Table 7-A. Livermore District

Company funded Plant Additions,
Including Carryovers and Non-Specifics
(Thousands of Dollars)

	2009	2010	2011	2012	AVG
DRA	$2,389.9	$1,348.6	$1,395.1	$925.0	$1,514.6
CWS	$4,819.1	$4,092.5	$2,228.4	$4,220.9	$3,840.2

Table 7-B. Specific Project Differences Comparison

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2009	11036	Purification	Chloramination - Sta. 19-01	$227,100	$220,400
2009	16947	Pumps	Generator, Panelboard, & SCADA Radio - Sta. 25	$210,600	$0
2009	17080	Mains	New Zone 7 Service Connection #11	$744,900	Cancelled by CWS[27]
2009	17083	Pumps	Replace Pump - Sta. 10-01	$60,500	$0
2009	17084	Pumps	Replace Pump - Sta. 8-01	$63,200	$48,200
2009	17695	Structures	Security Mitigation Improvements	$77,400	$0
2009	17696	Structures	Security Mitigation Improvements - Sta. 22, 23, & 25	$118,200	$114,400
2010	18696	Storage	Circulation Equipment - Sta. 23 Mocho Tanks 1 & 2	$315,103	$0
2010	16949	Pumps	Replace Booster Pumps - Sta. 13	$221,936	$161,000
2010	19627	Storage	Paint Interior - Sta. 23 - Mocho TK1	$282,228	$193,100
2010	21190	Purification	Nitrate Analyzer - Sta. 14	$34,383	$18,400

[27] CWS informed DRA during its site visit that this project would be moved to the next GRC due to delays in negotiations with Zone 7.

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2011	19630	Storage	Paint Exterior Complete - Sta. 23 Mocho Tanks 1 & 2	$610,400	$340,300
2012	19695	Pumps	Re-Pave, Reconstruct and Slurry Seal - Sta. 8	$63,720	Cancelled by CWS[28]
2010	20331	Pumps	Energy Monitoring Program	$80,100	Pilot Program in Marysville
2011	20331	Pumps	Energy Monitoring Program	$82,000	Pilot Program in Marysville
2012	20331	Pumps	Energy Monitoring Program	$91,519	Pilot Program in Marysville
2012	20547	Pumps	Replace Pump, Motor, & Energy Monitoring - Sta. 5-01	$30,000	Cancelled by CWS[29]
2011	20550	Pumps	Replace Pump, Motor, & Energy Monitoring - Sta. 14-01	$100,604	$0
2010	20552	Pumps	Replace Pump - Sta. 25-A	$92,491	$0
2011	20553	Pumps	Replace Pump, Motor, & Energy Monitoring - Sta. 23-F	$45,397	$30,000
2011	20556	Pumps	Replace Pump, Motor, & Energy Monitoring - Sta. 20-A	$60,074	$0
2011	20909	Equipment	Mobile Radio	$2,200	$0
2011	20909	Equipment	Truck Upfitting - 0.5 PU - Utility Worker	$7,600	$0
2011	20909	Equipment	0.5 Ton Pick Up - Utility Worker	$33,000	$0
2011	21185	Purification	Chloramine Treatment Equipment - Sta. 10	$250,600	$218,200
2011	21344	Wells	Drill, Develop, & Equip New Well	$2,214,,000	$0
2012	21352	Pumps	Hydraulic Model Recalibration	$54,000	$0
2012	21361	Pumps	Booster Pump - Sta. 23	$107,200	$0
2011	21362	Pumps	Replace Booster Pumps, Panel, & Tank - Sta. 11	$176,407	$0

[28] Appendix B to this report, CWS response to DRA data request MD7-017, Question 3.

[29] Appendix B to this report, CWS response to DRA data request MD7-017, Question 4.

C. DISCUSSION

The Livermore District has recorded $2,953,800 per year in average gross plant additions during the past five years (2004-2008).[30] During this same period, the Commission authorized $2,259,000 per year in average gross capital additions for the Livermore District that were included in rates.[31] The district's average gross plant addition request for the period of 2009-2012 is $4,548,900 per year, which represents a 54% increase over historical recorded plant additions. On a going-forward basis, DRA recommends $2,243,400 per year in average gross plant additions during 2009-2012.

1) Carryover Projects

CWS identifies $1,913,341 in 2009 and $26,700 in 2010 carryover projects, respectively, in its ratebase workpapers. In the Results of Operation report for the Livermore District, CWS identifies a total of $1,543,000 in carryover projects. DRA was not able to reconcile the two estimates, even after it sent a clarifying data request to CWS.

Based upon the CWS response to DRA data request MD7-008 on all carryover projects, DRA calculated its carryover estimate by subtracting advice letter projects from the carryover totals, since advice letter projects have uncertain costs and completion dates, and may not occur at all.[32] DRA estimates a carryover capital budget of $1,475,000 in 2009 for this rate case cycle.

[30] Gross plant additions include Company funded plant additions as well as contributions and advance deposits for specific plant.

[31] Appendix B to this report, CWS response to DRA data request MD7-001.

[32] Advice letter projects are handled separately though a rate base offset.

2) Main, Services and Hydrant Replacement Projects

CWS requests a total of $4.0 million for the years 2009-2012 in Company funded specific Mains, Service, and Hydrant replacement projects as shown in Table 7-C below:

Table 7-C. Requested Mains, Streets, Services and Hydrants Replacement Costs

	2009	2010	2011	2012	Totals
Mains	$1,264,000	$1,518,216	$0	$682,706	$3,464,922
Services	$68,100	$63,342	$0	$269,400	$400,842
Hydrants	$17,500	$42,933	$0	$99,124	$159,557
Non-Specific Mains, Services, Streets and Hydrants	$422,900	$431,800	$441,800	$451,400	**$1,747,900**
Total Specific	$1,349,600	$1,624,491	$0	$1,051,231	**$4,025,321**
Total including non-specific	$1,772,500	$2,056,291	$441,800	$1,502,631	**$5,773,221**

The $4.0 million in specific projects is in addition to the requested $1.7 million in non-specific mains, service, street and hydrant replacement projects, for a total of $5.8 million in mains, hydrants, and service replacement projects.

CWS declined to provide historical costs for mains, services, hydrants, valves and meters to DRA, despite multiple data requests.[33] CWS' claimed justification for these projects usually include assertions of either numerous leaks or fireflow improvements as justifications for replacement of these mains, services, and hydrants.

a. **Fireflow:** In terms of fire flow, according to GO 103-A, "The utility shall not be responsible for modifying or replacing at its expense any existing facilities, which are otherwise adequate, in order to provide

[33] Appendix B to this report, see non-responsive CWS answers to DRA data requests MD7-016, MD7-017 and NKS-005.

increased fire flow or duration due to changes in the standards after the initial construction."[34] CWS' replacement of pipe merely to improve fireflow cannot therefore be justified.

b. **Leaks/100 miles of main:** Further, CWS provided the following response to ALJ O'Donnell's request for an exhibit showing CWS' methodology for mains replacement, "CWS annually determines the number of leak for each district on the basis of leaks per one hundred miles of main. This information along with the actual length of targeted mains in a district is used to set the annual target main replacement length." However, when DRA asked for the leaks per one hundred miles of main for projects in this GRC, CWS was unable to provide such information.[35]

c. **Repair vs replacement:** When DRA asked CWS how it concluded a particular targeted main was beyond its "useful life", CWS responded: "In reality, one can extend the "useful life" of many facilities, but the cost to do so may outweigh the cost to replace."[36] However when DRA asked CWS if it did any analysis to show that the cost to repair was higher than the cost to replace for the targeted mains in this general rate case, CWS said it had not done such an analysis.[37]

DRA therefore concludes that CWS is not able to effectively prioritize its specific hydrant, main and service replacement projects based on actual conditions of the pipe and through the use of tools such as AWWA's "Decision Support

[34] GO 103-A, VI. Fire Protection Standards, 3.Replacement of Mains A.Changes to Fire Code, p.25.
[35] Appendix B to this report, CWS response to DRA data request NKS-006, question 7.
[36] Appendix B to this report, CWS response to DRA data request NKS-002, question 11.

System for Distribution System Piping Renewal," which have been available since 2002.[38] DRA notes that other utilities, such as California American Water Company, routinely prepare a "Condition Based Assessment" document prepared by a licensed professional engineer to assess the condition of their transmission and distribution systems, in each district to identify and prioritize investment in transmission and distribution infrastructure.[39]

DRA therefore recommends that the Commission:

1) Disallow the specific main, hydrant and services replacement projects i.e. a total of $4.0 million.
2) Allow the adjusted[40] non-specific budget in the amount of $1.6 million for mains, service, street and hydrant projects to cover any repairs or unforeseen circumstances.
3) Direct CWS to develop a "condition-based assessment" prepared by a licensed professional engineer including a prioritization plan, a comparison of the cost to repair versus replacement, and an analysis of leaks/100 miles to justify its main replacement programs in future rate cases.

(continued from previous page)

[37] Appendix B to this report, CWS response to DRA data request NKS-002, question 8.

[38] Appendix B to this report, CWS response to DRA data request NKS-002, question 12. CWS replied it had not used this or a similar tool to evaluate its mains targeted for replacement in this general rate case.

[39] For example, in A.08-01-027, Cal Am conducted a condition-based assessment of its infrastructure for its Monterey district, and prioritized its proposals in that rate case based on the condition of the infrastructure.

[40] Non-specific capital budgets have been adjusted for DRA's inflation forecast as discussed at the end of the chapter.

3) Projects 17083, 17084, 16949, 16947, 20547, 20550, 20552, 20553, 20556, 21361, 21362 - Pump Replacement Program

CWS budgets $355,100 in 2009, $413,902 in 2010, $464,482 in 2011, and $1,286,104 in 2012 for specific capital additions for pump replacement projects and associated energy monitoring devices (total budget of $2.5 million). CWS also requests $440,900 in non-specific pump projects during 2009-2012, a total request of nearly $3 million in pump replacement projects. CWS claims that the pump replacement projects are necessary due to low efficiency pumps and motors. CWS also claims that meeting 40 psi pressure requirements during peak hour demand (PHD) and maximum day demand plus fire flow requirements require pump and motor replacement. However, in both cases CWS incorrectly cites the applicable standard. DRA verified that during hours of peak demand, GO 103-A only requires 30 psi at service connections.[41]

> "Each potable water distribution system shall be operated in a manner to assure that the minimum operating pressure at each service connection throughout the distribution system is not less than 40 psi nor more than 125 psi, **except that during periods near PHD the pressure may not be less than 30 psi** and that during periods of hourly minimum demand the pressure may be not more than 150 psi."

CWS' Water Supply & Facilities Master Plan (WS&FMP) performed a hydraulic analysis on the Livermore water distribution system, based upon a criterion of meeting MDD while maintaining 20 psi at all service connections to determine fire flows. This is a flawed assumption, as there is no requirement to meet MDD plus fire flow for an existing water system. Only new portions of a

[41] GO 103-A. 6A. Variations in Pressure, p. 30.

water distribution system are required to meet this standard.[42] Therefore, the Commission should discount any fire flow deficiencies alleged as a result of this analysis.

The following table from Standard Practice U-3-SM shows the CPUC metrics for pump efficiency ranges:[43]

Table One: Pump Efficiency Ranges—Percent Wire to Water (from Case No. 10114)

Motor HP	Poor	Fair	Good	Excellent
3-5	41.9 or less	42-49.9	50-54.9	55 or above
7.5-10	44.9 or less	45-52.9	53-57.9	58 or above
15-30	47.9 or less	48-55.9	56-60.9	61 or above
40-60	52.9 or less	53.59.9	60-64.9	65 or above
75 and above	55.9 or less	56-62.9	63-68.9	69 or above

DRA discovered that in most of the proposed projects, based upon recent pump test data, the pump's efficiency was rated "Fair" or "Good," and in a few cases the pumps were rated "Poor" in terms of operational plant efficiency ("OPE"). DRA recommends approving the following replacement projects, which had recent pump ratings of poor and showed the potential for significant cost savings: project 17084 (well pump 8-01), project 16949 (booster pumps 13-B & 13-C), and project 20553 (booster 23-F). DRA adjusted the estimated cost of projects 17084 and 20553 by removing $15,000 in energy monitoring equipment costs. DRA also adjusted the costs for project 16949 by using a similar project cost estimate CWS provided.[44]

The pump for project 20552 (booster pump 25-A) had a poor rating, but the pump test data estimated that a meager $80 per year would be saved by maximizing its efficiency through replacement. Therefore, DRA does not

[42] GO 103-A. II. Standards of Service. 2. Water Quality and Supply Requirements B. Quantity of Water. 3b) Potable Water System Capacity, p.11.

[43] Standard Practice U-3-SM, http://docs.cpuc.ca.gov/word_pdf/REPORT/83111.pdf.

[44] Appendix B to this report, CWS response to DRA data request MD7-010, Question 4.

recommend approving project 20552. Project 21361 referenced the same pump (booster 23-F) in its project justification[45] as project 20553, a clear duplication of efforts, which DRA does not recommend approving.

Project 16947 budgets $210,600 in 2009 to add a generator, replace a panelboard and install a master SCADA radio at station 25. In the last GRC, DRA reviewed this project and CWS and DRA agreed to defer it until the current rate case. DRA also notes that its last report incorrectly cited the WS&FMP as supporting this project when no such recommendation was made.[46] The project justification states that the station is of critical importance because it houses the master SCADA radio. However, in the CWS cost estimate, a line item for $20,000 to install a master SCADA radio is included. Regardless of this obvious discrepancy, DRA learned during its site tours that CWS' current SCADA RTU's have 4 hours of battery backup power in the case of a power outage. Therefore, a diesel generator is unnecessary at this Station. According to the WS&FMP there is already a SCADA system at station 25, so no additional SCADA is required. Furthermore, station 11, station 32, the Zone 7 turnout VIII and an emergency connection with the City of Livermore all pump to zone 685, which CWS claims would be isolated in the event of a power outage. DRA does not recommend approving this project.

Therefore, DRA recommends that the Commission:

1) Allow $387,000 in specific pump replacement projects and associated auxiliary equipment, while disallowing the remainder ($2.1 million) of CWS' request.

[45] Ibid.

[46] The Livermore WS&FMP recommends rehabilitating or replacing booster pump & motor A at Station 25, not installing a generator, new panelboard or Master SCADA system, p. 7-5.

2) Allow the adjusted[47] non-specific pump replacement budget in the amount of $401,600 prioritized for projects that will produce the greatest operational cost and energy savings.

3) Direct CWS to reevaluate its pump replacement program with a targeted priority list based upon anticipated cost and energy savings due to pump replacement.

4) Project 21344 – New Well Construction & Land

CWS budgets $2.2 million in 2010-2012 for one new well in project 21344, including the purchase of land in zone 610. In its project justification, CWS states that zone 610 has a maximum day demand ("MDD") of about 6 MGD and has only one well in this zone. Purchased water from the Zone 7 wholesaler agency currently provides up to 16.3 MGD at five turn outs to CWS' zone 610.[48] CWS is also limited to a maximum of 1,000 MG (3,069 AF) of groundwater extraction per year by Zone 7 which manages the groundwater basin. According to CWS staff, a recharge assessment fee of $820 per AF (acre foot) is levied on pumping over this quota.[49] The 2007 WS&FMP states that CWS is currently pumping up to the quota limit enforced by Zone 7 and cannot pump more without incurring significant fees.[50] According to GRC data CWS provided through 2008, this situation has not changed.[51] The Livermore Urban Water Management Plan[52]

[47] Non-specific capital budgets have been adjusted for DRA's inflation forecast as discussed at the end of the chapter.

[48] Livermore WS&FMP, p. 8-7.

[49] CWS currently pays $878 per AF for purchased water from zone 7 in 2010 after the most recent 9.25% rate increase. http://www.zone7water.com/index.php?option=com_content&task=view&id=30&Itemid=184

[50] Livermore WS&FMP, p.4-18 and Figure 4.4. Data through 2005.

[51] See GRC workpapers, Table 4-C.

[52] Completed in July 1, 2007.

("UWMP") further states that the CWS, "wells are capable of producing nearly three times the district's annual groundwater pumping quota,"[53] demonstrating that adding a new well will not allow any more water to be pumped due to groundwater quotas based on the operating safe yield of the groundwater basin.[54]

CWS states that the WS&FMP recommends constructing a new well on p.4-28. However, the WS&FMP actually states that well 8-01 should be abandoned for the following reasons: 1) the well has exceeded its design life; 2) the well casing is in poor condition and in need of immediate rehabilitation; and 3) it is threatened by an MTBE plume. There is no reason given why the well casing cannot be rehabilitated instead of the well being replaced. Wells should not be replaced simply because they have exceeded their design lifespan. Rehabilitation should be pursued before wells are abandoned unless evidence shows that rehabilitation is not an option.[55] Since MTBE is a concern at this well site, DRA recommends that the proceeds from the MTBE litigation case be applied to potential treatment of MTBE at this site. This well had a new submersible pump installed in 1990, a bowl assembly replacement in 2002 and a new well pump motor installed in 2000. DRA does not concur with the need to abandon this well. Since CWS requested in this rate case and DRA recommends approving replacement of the 20 year old well pump,[56] this well should remain in service for the foreseeable future with regular maintenance.

Finally, the WS&FMP did not identify any peak hour demand (PHD) or fire flow pumping capacity deficiencies in zone 610 during its hydraulic model

[53] Livermore UWMP, p.24.
[54] Ibid. The annual safe yield of the basin is determined to be 13,200 AF by Zone 7.
[55] The Livermore WS&FMP makes the same general statement on p.4-28.
[56] See Section 3 on the pump replacement program above.

simulation.[57] This simulation uses performance criteria of 40 psi at PHD and a MDD plus fire flow analysis that is more stringent than actual CPUC or California Department of Public Health ("CDPH") standards.

As has been shown above, CWS already has far more surplus groundwater capacity than it can fully utilize without paying steep fees. This means it is significantly more economical to purchase additional treated water instead of pumping more water, let alone constructing new multi-million dollar well projects. CWS should continue regular maintenance and rehabilitation programs when warranted to preserve its ability to maximize the 1,000 MG quota it is allocated by Zone 7 agency. More new wells are not needed to meet hydraulic restrictions, fire flow, or PHD conditions in zone 610. DRA has removed the capital costs associated with these projects from 2010-2012 plant additions.

5) Projects 18696 – Tank Turnover Equipment

CWS budgets $315,100 in 2010 capital additions for nitrification circulation control equipment at Station 23 "Mocha" Tanks 1 and 2. The budget also includes costs for seismic retrofits, new site piping and paving, along with other miscellaneous improvements. Currently, CWS staff prevents nitrification due to stagnant water conditions by drawing down the water level in the tanks to less than 40% of capacity and then refilling them. CWS states that this is a less than optimal situation since during the draw down of the tanks there is less water available for fire protection and storage. CWS did not provide information on how often it periodically performs the drawdown procedure or how long the tanks are left at 40% of capacity. Without this information, DRA cannot evaluate the benefits or necessity of installing $315,000 of internal tank circulation equipment

[57] Livermore WS&FMP p.8-12,13.

and seismic retrofits. Therefore, DRA recommends disallowing this project and removing the $315,100 from the 2010 capital addition budget.

6) Project 20331 - Energy Monitoring Program, 2009 – 2012

CWS budgets $253,600 during 2010-2012 for power meters, flow meters and pressure recording transducers to more accurately measure the real-time energy consumption at its well and booster stations in the Livermore District. DRA supports a pilot study of the energy monitoring program in the Marysville District to properly identify the implementation costs and operational benefits of having highly accurate and fine-scaled information on the unit costs (in both dollars and kWh) of water supply. DRA believes that a pilot program in the Marysville District is appropriate after CWS informed DRA that most of the capital infrastructure was already in place in this district, thus requiring little to no capital additions. Since the operational efficiency benefits are highly uncertain, a pilot program would allow quantification before a company-wide program is launched.[58] Therefore, DRA recommends that the energy monitoring program in Livermore be disallowed and removed from capital additions for those years.

7) Projects 21185 & 11036– Chloramination Conversion

CWS budgets $227,100 in 2009 capital additions, $228,800 in 2010 capital additions, and $250,600 in 2011 capital additions for conversion of one station in each year from chlorination to chloramination based disinfection. DRA agrees with CWS on the need to convert more of its disinfection facilities to match the disinfectant used by Zone 7, which provides purchased water to the district. DRA disagrees with some of the cost estimates however. Project 11036 for conversion of Station 19 in 2009 was previously approved at a cost of $220,400 according to

[58] In this GRC, CWS budgeted $3.7 million for the energy monitoring program on a company-wide basis.

CWS. DRA does not agree with CWS' new estimate of $227,100 which uses a higher 15% contingency factor merely because the reference project is 2 years old. In many other project cost estimates, CWS uses reference projects more than 2 years old and does not increase contingencies based upon this fact. In fact, the 2010 chloramination project only uses a 10% contingency factor. Therefore, DRA recommends approving project 11036 in 2009 at the $220,400 estimate agreed to in the last GRC.

CWS estimates that project 21185 for conversion of Station 10 will cost $250,600 based upon a 15% contingency and 10% overhead rate. DRA used a 10% contingency and 8% overhead rate to arrive at the cost estimate of $218,200 which is consistent with costs estimated in 2009 and 2010. DRA recommends approving project 21185 in 2011 at a cost of $218,200 and project 21183 in 2010 at a cost of $228,800.

8) Projects 21190– Nitrate Analyzer

CWS budgets $34,400 in 2010 capital additions for a new nitrate analyzer at Station 14. DRA agrees with the need to monitor nitrate levels at this station but disagrees with the cost estimate. Based upon a 2009 bid for a similar project in Los Altos (project 20071), DRA estimates a nitrate analyzer should cost no more than $17,000. DRA included the standard company wide overhead rate of 8% to arrive at a cost estimate of $18,400. DRA recommends approving project 21190 in 2010 at a cost of $18,400.

9) Projects 17695 & 17696 – Security Mitigation

CWS budgets $77,400 and $118,200 for projects 17695 and 17696, respectively, in 2009 capital additions for security mitigation improvements. In the last GRC, the Commission authorized CWS $114,400 for project 17696. In its current project justification for this project, CWS still lists the same budget with a

total cost of $114,400. DRA recommends approving the original budget as reflected in the current project justifications without revision due to the absence of supporting documentation. CWS included a further $77,400 in additional costs for security improvements that it did not provide detailed information on. From discussions during the site visit and from information provided in its application, these projects are Priority "B" as recommended by the Vulnerability Assessment produced by Black & Veatch. DRA does not recommend increasing the budget for these items without documented need and supporting evidence. Therefore, DRA recommends disallowing project 17695 while allowing project 17696 at the previously authorized cost of $114,400.

10) Vehicle Replacement, 2009 – 2012

CWS proposes replacing six vehicles over the 2009-2012 rate case cycle in the Livermore District.[59] DRA examined all the vehicle replacement projects and determined that none of the vehicles fail to conform to the current Department of General Services ("DGS") replacement criteria. However, DRA did notice that project 20909 to replace a 2001 Toyota Tundra was already booked to capital plant additions in 2008, under project 13059.[60] DRA recommends disallowing project 20909 at a total cost of $42,800 in 2011 capital additions due to CWS' prior replacement of this vehicle in 2008.

11) Projects 19627 & 19630– Tank Painting

CWS proposes $282,228 in 2010 capital additions for project 19627 to paint the interior of Mocha Tank 1 at Station 23 and $610,400 in 2011 capital additions for project 19630 to paint the interior of Mocha Tank 1 and 2 at Station

[59] Appendix B to this report, CWS response to DRA data request MD7-011, Question 1.
[60] Appendix B to this report, CWS response to DRA data request MD7-001.

23. DRA agrees that the repainting is necessary and prudent. DRA disagrees on the cost estimates however.

For project 19627, CWS referenced Mid-Peninsula Hillsdale Tank 1, with a total interior surface area of 17,168 sq. ft., completed in 2008 to obtain its unit cost. In addition to the unit costs, CWS assumes a 4% annual inflation rate, 24% for coating inspection and tests, 6% for engineering supervision and 8% for construction overhead. DRA believes that these costs are overestimated. DRA scaled the total cost ($175,300 including overhead) of the Hillsdale tank painting[61] and escalated for inflation to arrive at its interior estimate of $193,100. Therefore, DRA recommends that this project be approved at a revised cost of $193,100 in 2010.

For project 19630, CWS referenced South San Francisco Station 1, Collecting Tank 1, with a total exterior surface area of 7,348 sq. ft., completed in 2007. However, the project requires 49,800 sq. ft. of external painting, so a better cost per foot reference would be the Simla Tank in Los Altos, with an external surface area of 12,422 sq. ft., completed in 2008. DRA scaled the total cost ($80,065 including overhead) of the Simla Tank painting[62] and escalated for inflation to arrive at its budget of $340,300. Therefore, DRA recommends that this project be approved at a revised cost of $340,300 in 2011.

12) Non-specific Capital Budgets, 2009 to 2012

CWS proposes $636,100, $649,500, $664,400, and $679,000, respectively in plant additions for non-specifics in the four years from 2009 to 2012. CWS non-specific estimates are based on a 10-year average with a 2% yearly escalation factor. DRA agrees with using the 10-year average, but uses escalation factors for

[61] Ibid.
[62] Ibid.

2009 through 2012 from the May 2009 Energy Cost of Service Branch escalation factors memo. These factors are: 2009 = (5.5)%; 2010 = (0.1)%; 2011 = 2.0%; 2012 = 2.7%. Using these escalation factors the non-specific estimates are $589,200, $588,600, $600,400, and $616,700 for 2009, 2010, 2011, and 2012, respectively.

D. CONCLUSION

DRA's recommendations have been incorporated in the calculations for DRA's recommended Plant in Service as shown in Table 7-1 and Table 7-2.

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

PLANT IN SERVICE

TEST YEAR 2011

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Plant in Service - BOY	54,990.0	60,286.3	5,296.3	9.6%
	Additions				
	Gross Additions	2,103.8	2,937.1	833.3	39.6%
	Capitalized Interest	49.5	68.6	19.1	38.6%
	Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
	Retirements	(200.6)	(200.6)	0.0	0.0%
	Net Additions	1,952.7	2,805.1	852.4	43.7%
	Adjustments				
	Gen. Plant allocated to contracts	(6.1)	(6.9)	(0.8)	13.1%
	Historic Capitalized Interest	(226.7)	(226.7)	0.0	0.0%
	Plant in Service - EOY	56,942.7	63,091.4	6,148.7	10.8%
	Weighting Factor	30.5%	30.5%		
1	Wtd. Avg. Plant in Service	55,353.1	60,908.7	5,555.6	10.0%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

PLANT IN SERVICE

ESCALATION YEAR 2012

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Plant in Service - BOY	56,942.7	63,091.4	6,148.7	10.8%
	Additions				
	Gross Additions	1,633.6	4,929.6	3,296.0	201.8%
	Capitalized Interest	37.9	118.6	80.7	212.9%
	Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
	Retirements	(192.0)	(192.0)	0.0	0.0%
	Net Additions	1,479.5	4,856.2	3376.7	228.2%
	Adjustments				
	Gen. Plant allocated to contractors	(6.2)	(7.0)	-0.8	12.9%
	Historic Capitalized Interest	(213.9)	(213.9)	0.0	0.0%
	Plant in Service - EOY	58,422.2	67,947.6	9,525.4	16.3%
	Weighting Factor	30.5%	30.5%		
1	Wtd. Avg. Plant in Service	57,174.1	64,352.5	7,178.4	12.6%

CHAPTER 8: DEPRECIATION RESERVE AND DEPRECIATION EXPENSE

A. INTRODUCTION

This chapter presents DRA's analyses and recommendation on Depreciation for CWS' Livermore District. Tables 8-1 and 8-2 show weighted average accumulated depreciation and amortization for Test Year 2011 and Escalation Year 2012.

B. SUMMARY OF RECOMMENDATIONS

Differences in DRA's and CWS' estimates are the result of different plant additions for the test year and the escalation year. These differences are discussed in Chapter 7, Plant in Service.

C. DISCUSSION

CWS depreciation rates for components listed in the CPUC Uniform System of Accounts for Water Utilities are based on a "Depreciation Study as of December 31, 2006" prepared by AUS Consultants dated June 21, 2007. If the depreciation rates proposed in the study are used, instead of the depreciation rates adopted in D.06-08-011, the overall composite depreciation rate for the Livermore District increases by 0.71% (from 2.54% to 3.25%) and 0.69% (from 2.56% to 3.25%) in Test Year 2011 and Escalation Year 2012, respectively.

DRA accepts the depreciation rates for accounts as provided by CWS, but recommends that DRA perform an audit of CWS' submitted Depreciation Study in the next General Rate Case. The Depreciation Study should use a 0% salvage value for small mains (<6" in diameter). This recommendation is consistent with

the procedure that CWS uses to replace these small mains, abandoning the old main in place, when it is replaced.[63]

Based on the annual depreciation rates for accounts as provided in CWS' Depreciation Study the CWS estimates of implicit composite depreciation rates are 3.25% for Test Year 2011 and 3.25% for Escalation Year 2012. The DRA estimates of implicit composite depreciation rates are 3.29% for Test Year 2011 and 3.29% for Escalation Year 2012.[64] Differences between CWS and DRA estimates for composite depreciation rate are due to differences in Plant-in-Service estimates and subsequent differences in Beginning of Year Gross Depreciable Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates are discussed in Chapter 7.

D. CONCLUSION

DRA reviewed and accepts the methodologies outlined in CWS' Depreciation Study. DRA recommends an audit of CWS' Depreciation Study in the next GRC.

DRA recommends that the Commission adopt DRA's adjusted numbers for depreciation.

[63] For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4" main is $0, this is also attached as Tab L in Appendix B to this report.

[64] Composite Depreciation Rates can be found in Workpaper 9-B2.

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Depreciation Reserve - BOY	16,698.4	16,754.1	55.7	0.3%
	Accruals				
	Transportation Equipment	22.6	24.3	1.7	7.5%
	Contributed Plant	151.7	149.9	(1.8)	-1.2%
	Allocated non-reg contracts	0.3	0.3	0.0	0.0%
	Other Plant in Service	1,617.5	1,752.6	135.1	8.4%
	Total Accruals	1,792.1	1,927.1	135.0	7.5%
	Retirements	(234.2)	(234.2)	0.0	0.0%
	Depreciation Reserve - EOY	18,104.6	18,297.1	192.5	1.1%
	Weighting Factor	50%	50%		
1	Wtd. Avg. Depr. Reserve	17,401.5	17,525.6	124.1	0.7%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Depreciation Reserve - BOY	18,104.6	18,297.0	192.4	1.1%
	Accruals				
	Transportation Equipment	22.8	26.6	3.8	16.7%
	Contributed Plant	160.5	158.5	(2.0)	-1.2%
	Allocated non-reg contracts	0.3	0.3	0.0	0.0%
	Other Plant in Service	1,672.2	1,831.4	159.2	9.5%
	Total Accruals	1,855.8	2,016.8	161.0	8.7%
	Retirements	(226.9)	(226.9)	0.0	0.0%
	Depreciation Reserve - EOY	19,733.5	20,086.9	353.4	1.8%
	Weighting Factor	50%	50%		
1	Wtd. Avg. Depr. Reserve	18,838.8	19,112.7	273.9	1.5%

CHAPTER 9: RATEBASE

A. INTRODUCTION

DRA and CWS' estimates for Rate Base for Test Year 2011 and Escalation Year 2012 are discussed in this Chapter.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends adoption of its estimates for: Plant in Service, Depreciation Reserve, and Rate Base.

C. DISCUSSION

Tables 9-1 & 9-2 show DRA's and CWS' estimates of Rate Base for Test Year 2011 and Escalation Year 2012. The significant differences between the Rate Base developed by DRA and CWS are due to the differences in the estimates for Weighted Average Plant in Service, Depreciation, Working Cash, and General Office Allocation.

D. NET-TO-GROSS MULTIPLIER

The net-to-gross multiplier represents the change in gross revenue required to produce a unit change in net revenue. Both DRA and CWS have calculated three multipliers which reflect: 1) the increase required under 100% equity-financing where State and Federal taxes are incurred; 2) the increase required under 100% debt financing where taxes are not incurred (identical to the increase necessary to offset expenses); and 3) the increase required for additions to ratebase, which incorporates the capital structure and financing costs of the utility.[65]

[65] As adopted in Commission Decision 09-05-019

DRA and CWS use similar methodologies in calculating the net-to-gross multipliers. Calculations are shown in Table 9-3 and results are presented below. In the calculations, DRA included the business license fees which had been omitted by CWS. Also, DRA's adjustment to the Domestic Production Activities Deduction (*see Chapter 5*) results in higher numbers than those calculated by CWS.

California Water Service Company
LIVERMORE
Net to Gross Multiplier

	CWS	**DRA**
100% Equity	1.60604	1.68782
100% Debt (expense)	1.00223	1.01184
Ratebase Additions	1.32454	1.37268

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Wtd.Avg. Plant in Serv.	55,353.1	60,908.7	5,555.6	10.0%
Materials & Supplies	92.1	92.1	0.0	0.0%
Working Cash - Lead-Lag	(400.6)	(343.3)	57.3	-14.3%
Amt withheld from Employees	(4.7)	(4.7)	0.0	0.0%
Wtd. Avg. Depr. Res.	(17,401.5)	(17,525.6)	(124.1)	0.7%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	8,795.4	8,795.4	0.0	0.0%
Contributions	3,485.8	3,487.1	1.3	0.0%
Reserved Amort.Intangibles	37.5	37.5	0.0	0.0%
Deferred Taxes	3,766.2	3,766.2	0.0	0.0%
Unamortized ITC	86.2	86.2	0.0	0.0%
General Office Alloc	1,518.5	1,518.5	0.0	0.0%
Taxes on - Advances	946.7	946.7	0.0	0.0%
Taxes on - CIAC	246.3	246.3	0.0	0.0%
Average Rate Base	24,178.8	29,666.3	5,487.5	22.7%
Interest Calculation:				
Avg Rate Base	24,178.8	29,922.2	5,743.4	23.8%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	764.1	945.5	181.5	23.8%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	764.1	945.5	181.5	23.8%

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Wtd.Avg. Plant in Service	57,174.1	64,352.5	7,178.4	12.6%
Material & Supplies	92.1	92.1	0.0	0.0%
Working Cash - Lead-Lag	(426.5)	(357.6)	68.9	-16.2%
Amt withheld from Employees	(4.7)	(4.7)	0.0	0.0%
Wtd. Avg. Depr. Reserve	(18,838.8)	(19,112.7)	(273.9)	1.5%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	8,852.5	8,852.5	0.0	0.0%
Contributions	3,596.7	3,600.0	3.3	0.1%
Reserved Amort.Intangibles	48.2	48.2	0.0	0.0%
Deferred Taxes	3,787.8	3,787.8	0.0	0.0%
Unamortized ITC	82.1	82.1	0.0	0.0%
General Office Alloc	1,473.3	1,473.3	0.0	0.0%
Taxes on - Advances	899.3	899.3	0.0	0.0%
Taxes on - CIAC	236.9	236.9	0.0	0.0%
Average Rate Base	24,238.4	31,208.5	6,970.1	28.8%
Interest Calculation:				
Avg Rate Base	24,238.4	31,478.7	7,240.3	29.9%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	765.9	994.7	228.8	29.9%
less Cap. Interest	0.0	0.0	0.0	0.0%
1 Net Interest Expense	765.9	994.7	228.8	29.9%

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	0.22278%	0.22278%
2) 1-Uncoll (100%-line 1)	99.77722%	99.77722%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.94996%	0.00000%
6) Business license (line 5*line 2)	0.94784%	0.00000%
7) Subtotal (line 1+line 4+line 6)	1.17062%	0.22278%
8) 1-Subtotal (100%-line7)	98.82938%	99.77722%
9) CCFT (line 8 * 8.84%)	8.73652%	8.82031%
10) Domestic Production Activities Deduction *	1.96465%	8.97995%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	30.84487%	28.69194%
12) Total taxes paid (ln 7+ln 9+ln 10)	40.75201%	37.73502%
13) Net after taxes (1-line 11)	59.24799%	62.26498%

Net-to-Gross Multiplier (1/line 12) = 1.68782 (DRA)
Net-to-Gross Multiplier (1/line 12) = 1.60604 (Utility)

* DRA - Line 8 mius Line 9 multiplied by 9% multiplied by percentage of Qualified Activities
CWS - only multiplies Line 8 by 9%

This net-to-gross multiplier is to be used for changes in net revenue
attributable to rate of return changes only and not to be used for rate base offsets.
The net-to-gross for rate base offsets is much lower because the interest payments
1 for the debt portion of rate base increase is tax deductible.

CHAPTER 10: CUSTOMER SERVICE

A. INTRODUCTION

DRA has reviewed California Water Service Company's ("CWS'") filing, responses to DRA data requests, and data obtained from the Commission's Consumer Affairs Branch regarding customer complaints in the Livermore District.

B. SUMMARY OF RECOMMENDATIONS

DRA finds CWS' customer service record satisfactory and the customer service process reasonable.

C. DISCUSSION

1) Customer calls and complaints

The Livermore District office handled an average of 16,000 calls per year in the last 3 years. The customer service representatives ("CSR") in the district office handle all customer complaint calls. When a customer calls the district office, the CSR logs the date and time of the call along with a description of the complaint into the Customer Service Information system. The majority of customer complaints are resolved the same day they are received. Billing questions make up a large portion of the calls received by the district office. The CSR tries to resolve the billing issue directly. However, if a resolution can not be reached, the Customer Services Manager in each district is empowered to make billing adjustments as needed.

All customer complaints filed with the Commission are sent to the CWS rates department and follow a different procedure than described above. The rates department contacts the district office to inform them of the complaint with the goal of resolving the issue within 7 days. The district office researches the complaint, contacts the customer to inform them of the investigations findings and

works to reach a resolution. Then the district office submits its findings and resolution to CWS' rates department for review. CWS' rates department then contacts the Commission's Division of Water and Audits or the Consumer Affairs branch to present the complaint findings. Complaints filed by customers with the Commission since the last GRC were few in number, and most were regarding billing, and one regarding the Extended Service Protection Program ("ESP").

2) Water Quality complaints

CWS' records indicate that the number of water quality complaints have been low relative to the number of customers in the Livermore District. An effective system is in place to receive and record customer complaints concerning water quality. Customer complaints regarding taste and odor are handled by a CSR who explains to the customer why those types of conditions occur. Other types of complaints, such as low pressure or the presence of sand in the water, require a serviceman to go out to the premises and investigate the complaint. When a service call is required, the CSR notifies the maintenance department. CWS assigns personnel to investigate the problem, notify the customer, and resolve the issue. The majority of these complaints are resolved by inspection of the premises. CWS tracks all water quality complaints in their system and records them on a monthly summary report.

Table 10-A shows water quality customer complaint data for the last three years. There are six categories for the different kinds of water quality complaints. These categories are defined as:

- Air - can be trapped in water causing a milky appearance which goes away when allowed to stand and the air goes to the surface;
- Dirty - can be discolored water or sand in the water from mainline flushing or a main break in the area;

- Noise - can be associated with the water system, such as wells turning on, or the customer's internal plumbing;
- Pressure - can be too high or too low; and
- Taste or odor - can be stronger than usual from chlorine, or a musty odor the customer is not accustomed to.

Table 10-A

Livermore District Customer Water Quality Complaints			
Type	2006	2007	2008
Air	0	1	0
Dirty water	6	13	9
Noise	0	0	0
Pressure	39	32	30
Sand	0	0	1
Taste/Odor	15	13	6
Total	60	59	46
Number of Customers	17,775	17,814	17,842
Total as % of Customers	0.3%	0.3%	0.3%

CWS investigated a total of 101 complaints regarding pressure in the past 3 years. CWS determined the majority to be problems with the customer's plumbing, such as, clogged faucets or screens, pressure higher or lower than the customer wished, leaking pipes, house valves not fully opened, inadequately designed irrigation system, or improperly operating customer pressure reducing valves. Three complaints were attributed to CWS system operations. These were caused by low pressure due to a pump station becoming air blocked, storage tanks filling at station 13 causing low pressure to Crane Ridge, and peak demand time along with station filling.

D. CONCLUSION

DRA recommends the Commission find CWS' customer service to be satisfactory.

CHAPTER 11: RATE DESIGN

A. INTRODUCTION

In this GRC application (09-07-001), CWS requested changes to the non-residential rate design in Special Request #6, and requested changes to the residential rate design in Special Request #11. Thus, the scope of this chapter is limited to recommendations regarding:

1) The Water Revenue Adjustment Mechanism and Modified Cost Balancing Accounts ("WRAM/MCBA"),[66]
2) Impacts of the conservation rate designs to date
3) Impacts on Low Income customer disconnections, and
4) Low income rate assistance surcharges

B. SUMMARY OF RECOMMENDATIONS

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

DRA recommends that the Commission require CWS to modify the WRAM/MCBA so that it does not disproportionately disadvantage ratepayers compared to shareholders. The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that if there are reductions in consumption, ratepayers and shareholders should split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA sur-credits should be a flat amount applied to the service charge

When there is a combined over-collection in the WRAM/MCBA, the over-collection should be passed on to ratepayers through a flat surcredit on the service

[66] Other than recommendations regarding WRAM/MCBA in DRA's special request chapters.

charge. This change to the surcredit mechanism will ensure that water-conserving customers who use less water do not receive less surcredit than customers who use large quantities of water. This will enhance the conservation price signal.

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

This GRC application from CWS contains six months of consumption data after CWS implemented the rate design and WRAM/MCBA mechanism Trial Programs. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs. The Commission should evaluate the impacts of the conservation rate designs in CWS' next GRC.

3) The Commission should require CWS to monitor disconnections by month and communicate payment options to customers

The Commission should require CWS to continue to track the number of residential and LIRA customer disconnections per month. If the number of disconnections has increased, CWS should develop a low-cost customer communication plan to reduce the number of disconnections. In particular, CWS should place messaging in customers' bills and on its website explaining to customers the options that are available to them if they cannot pay their bills.

4) The Commission should authorize CWS to increase the surcharge for the low-income rate assistance program as necessary to continue to provide the benefit to qualifying customers

CWS states that it proposed to increase the surcharge to fund the low-income rate assistance ("LIRA") program.[67] DRA supports an increase in the surcharge to support the forecasted participation levels in the LIRA program.

C. DISCUSSION

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

When the Commission adopted the WRAM/MCBA decoupling mechanism for CWS, the concept of the mechanism was to ensure a proportional impact on the utility and ratepayers when CWS implemented conservation rates. DRA's settlement with CWS, adopted in D.08-02-036 states:

> "Parties agree that the desired outcome and purpose of using WRAMs and MCBAs is to ensure that the utility and ratepayers are proportionally affected when conservation rates are implemented.
>
> a. In the context of this agreement, a proportional impact means that, if consumption is over or under the forecasted level, the effect on either the utility or ratepayers (as a whole) should reflect that the costs or savings resulting from changes in consumption will be accounted for in a way such that neither the utility or ratepayers are harmed, or benefit, at the expense of the other party."[68]

Since it is too early to evaluate quantitative usage data on the impacts of the conservation rate designs,[69] it is difficult to determine how much sales have

[67] Report on the Results of Operation, July 1, 2009.

[68] Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

[69] At the time CWS filed this GRC, there were only six months of usage data after implementation of the WRAM/MCBA and rate design Trial Programs, and CWS did not provide an analysis of this usage information to determine whether the utility and ratepayers are

(continued on next page)

decreased due to the effects of conservation oriented rates. But it is unreasonable to assume that all recorded decrease in sales was entirely due to conservation oriented rates and conservation programming, as it is certain that some portion of the decrease was due to the economic downturn and other factors. Yet, as a result of the WRAM/MCBA, ratepayers are currently bearing the full cost of the economic downturn. This issue must be addressed immediately. Therefore, until the impacts of conservation efforts can be better quantified, DRA recommends that the Commission modify the WRAM so that if there are reductions in consumption, rather than ratepayers being required to pay the full difference between the authorized quantity revenue and actual quantity revenue, ratepayers and shareholders split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected under the WRAM/MCBA decoupling mechanism, when conservation rates are implemented in accordance with the settlement.[70]

This issue should be examined in the next GRC, when over three years of consumption information will be available after the implementation of the WRAM/MCBAs and conservation rates. However, it is clear at this time that the WRAM/MCBA mechanisms have led to an unintended consequence: the WRAM shields shareholders from all financial consequences of the severe economic downturn, while ratepayers bear the full cost of the economic downturn. This is an unintended consequence of the WRAM/MCBA trial program, not one of the goals of the program.[71]

(continued from previous page)
proportionally affected when conservation rates were implemented.

[70] Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

[71] The goals of the WRAM/MCBA mechanism trial program were three-fold:

a)"Sever the relationship between sales and revenue to remove any disincentive for the utility to implement conservation rates and conservation programs

(continued on next page)

While there is not currently a method available to apportion reductions in usage to each different cause – such as conservation and changes in economic conditions, it is clear that there are different factors that can affect water usage and each of them contribute to usage reductions. This is contrary to the WRAM/MCBA, which compensates CWS for all of the reductions in consumption, not just usage reductions from conservation. The Commission should modify the WRAM/MCBA mechanism so that it does not disproportionately disadvantage ratepayers compared to shareholders.

Further, the Commission specifically addressed the possible impact of a WRAM/MCBA for California American Water Company during an economic downturn in decision 08-06-002, p. 16, which stated:

> "One disparate impact that could occur in the Pilot Program period would be a severe economic downturn in one or more of the Los Angeles service areas that causes a significant decrease in revenues. This could occur from a high rate of home foreclosures and/or business slowdowns or shutdowns. We find this would clearly be a disparate impact as the WRAM mechanism would shield shareholders from all financial consequences of the economic downturn while requiring ratepayers to bear the full cost. Since Cal-Am will be tracking sales levels by customer class and service area, any disparate impact can be quickly seen and addressed."

CWS tracks sales levels by customer class and service area; and it is possible to calculate and graph changes in consumption in different classes and service areas. However, it is much more complex to determine or even speculate about the reasons for the changes in consumption. Especially because of the

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b)Ensure cost savings resulting from conservation are passed on to ratepayers.

c)Reduce overall water consumption by Cal Water ratepayers." (see the Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 8, section VI.1. Filed June 15, 2007, adopted in Decision 08-02-036).

significant economic downturn in recent years, that happens to coincide with implementation of increasing block rates, makes it difficult to draw conclusions about the reasons for any changing consumption patterns. Also, all CWS' districts under-collected revenue in the WRAM account during July – December 2008, except Bakersfield, King City, and Palos Verdes.[72] This is an indication that sales were lower than forecasted for almost all districts during this timeframe.

The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that ratepayers and shareholders split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA Sur-credits Should Be a Flat Amount Applied to the Service Charge

When there is a combined under-collection in the WRAM/MCBA, this should be recovered from ratepayers through volumetric surcharges, in accordance with Decision 08-02-036. This maintains the conservation price signals of the surcharge because customers who use more water pay a larger portion of the surcharge. However, when there is a combined over-collection in the WRAM/MCBA, this should be passed on to ratepayers through a flat surcredit on the service charge. This change to the surcredit mechanism will ensure that water-conserving customers who use less water do not receive less surcredit than customers who use large quantities of water. Furthermore, this will also enhance the conservation price signal.

This recommendation is important in light of the first six months of WRAM/MCBA and Rate Design Trial Program implementation where the over and under-collections in the net balance of the WRAM/MCBA typically were far

[72] CWS WRAM/MCBA report to the Division of Water and Audits, March 2009

greater than the 2.5%[73] trigger. In fact these balances were 10% or greater in seven districts, and were between 5% and 10% in another seven districts.[74]

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

DRA and CWS reached a settlement agreement on rate design and revenue decoupling on April 23, 2007, and amended the settlement on June 15, 2007. The Commission ultimately adopted the settlement on February 28, 2008 in decision 08-02-036, and CWS had 90 days after the Commission decision adopting the settlement before the Trial Program became effective. CWS implemented the Trial Program, including the WRAM/MCBAs and conservation rate designs, via Advice Letter 1855, which became effective on July 1, 2008. CWS filed this GRC application in July 2009, and included data through December 2008. Thus, this GRC contains six months of consumption data after CWS implemented the WRAM/MCBA mechanisms. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs.[75]

3) CWS should track low income disconnections on a monthly basis and provide this information in its annual report to the Commission on the WRAM/MCBA balances

Ordering Paragraph 6 from the Phase 1A Decision 08-02-036 from the conservation OII (I.07-01-022) ("OP6") requires CWS to provide data related to the implementation of the conservation rate design trial programs. Specifically, OP6 states:

> "6. Suburban, Park, and Cal Water shall provide the following information in their next general rate case: monthly or bimonthly (depending upon the billing

[73] The trigger is "2.5% of the district's total recorded revenue requirement for the prior calendar year" (see Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, Section IX 3) d., Filed June 15, 2007, adopted in Decision 08-02-036.

[74] See CWS WRAM/MCBA report to the Division of Water and Audits, March 2009.

[75] See Special Request #11 for further discussion.

> cycle) … increase or decrease in disconnecting low-income program participants for nonpayment by district after adoption of conservation rate designs; increase or decrease in low-income program participation by district after adoption of conservation rate designs; increase or decrease in residential disconnections for nonpayment by district after adoption of conservation rate designs…."

In this GRC application, CWS provided some of the information required in this Ordering Paragraph.[76] In particular, CWS provided information on customer disconnections for both residential and LIRA customer groups for the firs six months of Trial Program implementation between July 1, 2008 and December 31, 2008. However, this data incorrectly "double-counted" low income customer disconnections.[77] CWS provided corrected data for July 2008 through July 2009. However, CWS did not yet provide information about customer disconnections prior to July 2008.[78] In order for the Commission to assess the "increase or decrease" in low-income disconnections when CWS implemented the conservation rate design and WRAM/MCBA Trial Programs, pursuant to the above Ordering Paragraph, data on customer disconnections from before and after the implementation of the conservation rate designs must be compared. Since CWS only provided information from after the implementation of conservation

[76] Prepared Testimony of David Morse, p. 28 – 31.

[77] Email from CWS (Tu Rash), on 1/13/2010, states regarding the query Cal Water originally ran for Dave Morse "in effect that query double counted the number of LIRA customers."

[78] DRA requested information on residential and LIRA customer disconnections from July 2007 through July 2009 in LWA-5 on 12/22/09, and CWS provided an initial response on 12/31/09, but it did not correspond to the numbers in David Morse' testimony, so CWS provided a revised response on 1/5/2010, but this still did not correspond to the numbers in David Morse' testimony. CWS provided a further revised response on 1/13/2010, but this only provided data from 2008-2009. At the time DRA had to finalize this testimony, it had not yet received final numbers for residential and LIRA customer disconnections from July 2007 through 2009, although DRA is confident CWS would have provided the information to comply with this ordering paragraph had there been unlimited time.

rate designs, this is not in compliance with OP 6. DRA believes CWS intended to provide the correct information and CWS should provide this information in its rebuttal testimony so that the Commission can consider it in this proceeding.

On a going forward basis, the Commission should require CWS to continue to track the number of residential and LIRA customer disconnections per month and report this information in the annual report that CWS submits to the Commission by March 31 each year regarding WRAM/MCBA balances.[79] If the number of disconnections has increased, CWS should develop and implement a low-cost customer communication plan to reduce the number of disconnections. In particular, CWS should place messaging on customer bills and on CWS' website explaining to customers the options that are available to them if they cannot pay their bills. For example, PG&E has a message on its website that says:

> "We Know Times Are Tough.
> If you or someone you know is having trouble paying your bill, we can help. Please call us today at 1-800-743-5000 so we can discuss program options and payment arrangements that work for you."[80]

Another example is San Diego Gas and Electric Company, which has messaging on its website that provides a rotational link to "Need Extra Help With Your Bill? Learn about available assistance" and "Get extra help with your bill."[81]

4) The Commission should authorize CWS to increase the surcharge for the low-income rate assistance program as necessary to continue the benefit for qualifying customers

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[79] Pursuant to "Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues," section IX 3), Filed June 15, 2007, adopted in Decision 08-02-036.

[80] http://www.pge.com/myhome/ (accessed 1/28/2010).

[81] http://www.sdge.com/index/ (accessed 1/28/2010).

CWS states that it proposed to increase the surcharge to fund the low-income rate assistance ("LIRA") program.[82] The Commission authorized the LIRA program in D.06-11-053, and it provides a 50% discount on the service charge to qualifying households. DRA supports the continuation of the LIRA program as authorized in D.06-11-053. To the extent that an increase in the surcharge is necessary to support the LIRA program at forecasted participation levels, the Commission should authorize the increase in the surcharge. DRA notes that this surcharge is combined with the surcharge for the Rate Support Fund ("RSF") and that CWS' requested increase from $0.009 to $0.015 per ccf[83] also includes the additional funding to support CWS' increases in the RSF subsidies. For this reason, the required increase in the surcharge to support only the LIRA program should be lower than $0.015 per ccf and should be calculated based upon the final revenue requirement in this case as well as the adopted rate of participation in the LIRA program.

D. CONCLUSION

The Commission should adopt the recommendations on rate design and revenue decoupling included in this chapter.

[82] Report on the Results of Operation, July 1, 2009, Chapter 12 "Present and Requested Tariffs" states that customers pay a surcharge of $0.009 per Ccf to fund the program and that CWS proposes to increase the surcharge to $0.015 per Ccf.

[83] Additional Prepared Testimony of Thomas Smegal, Special Request 11, p. 15, lines 21-22.

CHAPTER 12: WATER QUALITY

A. INTRODUCTION

The Rate Case Plan requires water utilities to submit information about water quality in their GRC applications. This Chapter presents DRA's review of water quality submittals by California Water Service Company ("CWS") for the Livermore District and CWS' response to DRA's data request.

The California Department of Public Health ("CDPH") is the primary agency responsible for ensuring that the water provided to the public by the District is safe for consumption. DRA reviewed the most recent CDPH inspection report available, the District's response to the report, and the CDPH's response to DRA's inquiry on the District's water quality issues and compliance status.

B. SUMMARY OF RECOMMENDATIONS

Based upon the information provided by the company and by the CDPH, CWS' Livermore District appears to be in compliance with all applicable water quality standards and requirements. Exceptions if any are noted below.

C. DISCUSSION

About a quarter of the District's water supply comes from its eleven active wells and one leased well (Mingoia well). The balance comes from treated water purchased from the Zone 7 of the Alameda County Flood Control and Water Conservation District ("Zone 7"). The District has not exceeded any primary or secondary Maximum Contaminant Levels ("MCLs") since the last general rate review. Water quality issues in this District include disinfection, nitrate, Tetrachloroethylene ("PCE") and storage tank nitrification.

Disinfection – CWS uses a combination of chlorination and chloramination for disinfection. Purchased water from Zone 7 is chloraminated. The CDPH

recommends that CWS continue its conversion from chlorine to chloramination for disinfection at all of its well sites.[84] This will reduce the possibility of completely eliminating the disinfectant residual when purchased water and well water mix.

Nitrate & PCE – Five of its active wells have nitrate contamination. Water from these wells is blended with Zone 7 purchased water. Four of its wells have PCE contamination: one has low levels and no treatment is proposed, two have Granular Activated Carbon ("GAC") treatment installed, and one has its water blended with Zone 7 water to lower the PCE concentration.

Nitrification – CWS also reports nitrification problems in its tanks and proposes installing mixing equipment at Station 23's tanks to address the problem. In response to DRA's data request, CWS indicates that it performs unidirectional flushing and tank management and monitoring, but the proposed equipment is also needed for the five-million gallons of storage at Station 23. This plant addition proposal is addressed in Chapter 7 – Utility Plant in Service in this Report.

The CDPH issued its most recent Annual Inspection Report on December 1, 2005. The CDPH, in response to DRA's inquiry, confirms that the District is in compliance with all applicable water standards.[85]

[84] December 3, 2009 email communications from Betty Graham of the CDPH to DRA.
[85] Ibid.

D. CONCLUSION

Based on the information received, it appears that CWS' Livermore District is in compliance with all applicable water quality standards and requirements and is addressing issues raised by the CDPH.

CHAPTER 13: STEP RATE INCREASE

A. FIRST ESCALATION YEAR

On or after November 1, 2011, the Commission shall authorize CWS to file a Tier 1 advice letter, with appropriate supporting workpapers, requesting the step rate increase for 2012 or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ending September 30, 2011, exceeds the lesser of (a) the rate of return found reasonable by the Commission for CWS for the corresponding period in the most recent rate decision or (b) the rate of return found reasonable in this case. This filing should comply with General Order 96-B.

The Commission's Water Division ("Water Division") should review the requested step rates to determine their conformity with this order, and the requested step rates should go into effect upon the Water Division's determination of compliance. The Water Division should inform the Commission if it finds that the proposed rates do not comply with this Decision. The Commission may then modify the increase. The effective date of the revised tariff schedule should be no earlier than January 1, 2012. The revised schedules should apply to service rendered on and after their effective date. Should a rate decrease be in order, the rates should become effective on the filing date.

B. SECOND ESCALATION YEAR

For the second year, the Commission should grant an attrition adjustment for the revenue requirement increases attributable to expense increases due to inflation and rate base increases that are not offset by revenue increases. The revenue changes shall be calculated by multiplying forecasted inflation rate and operational attrition plus financial attrition times adopted rate base in 2012 times the net-to-gross multiplier.

C. ESCALATION YEARS INCREASES

The table below shows the Summaries of Earnings for Escalation Years 2012 and 2013. To obtain the increases in these years, D. 04-06-018 and D. 07-05-062 require water utilities to file an Advice Letter 45 days prior to the start of the year showing all calculations supporting their requested increases.

The revenues shown in Table 13-1 are for illustration purposes and the actual increases would be authorized only after approval of the utility's advice letter.

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
LIVERMORE DISTRICT

Item	DRA 2011 (Thousands of $)	DRA 2012	% increase	
Operating revenues	18,586.4	18,997.1	2.2%	Esc. Factor
Operation & Maintenance	10,511.4	10,784.7	2.6%	1.026
Administrative & General	938.0	960.5	2.4%	1.024
G.O. Prorated Expense	1,864.0	1,912.5	2.6%	1.026
Depreciation & Amortization	1,672.2	1,715.7	2.6%	1.026
Taxes other than income	557.2	571.7	2.6%	1.026
State Corp. Franchise Tax	180.3	181.1	0.4%	
Federal Income Tax	783.6	786.3	0.3%	
Total operating expenses	16,506.7	16,912.4	2.5%	
Net operating revenue	2,079.7	2,084.8	0.2%	
Rate base	24,238.4	24,298.0	0.2%	
Return on rate base	8.58%	8.58%	0.0%	